

# What Encourages Green Textile Production in India?

*A Comparative Case Study of two Textile Producers*

**Anbjørg Kolaas**



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*Centre for Development and the Environment*

*University of Oslo*

*Blindern, Norway*

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# 1. Introduction

Welspun has most modern effluent treatment plants and waste disposal system. The company is conscious of maintaining the ecological balance at all plant locations (Welspun 2006).

The textile industry is vital to the economy and is today the largest industrial sector employer in India, providing occupation to over 26 million people (Vadhani 2005a). At the same time the textile industry is responsible for substantial amounts of pollution. In addition to pollution caused by dyes and other chemicals used during textile production, the processing of textiles consumes large amounts of water. Water consumption could be up to 500 l/kg (EPA 1996:18), with an average of 100 l/kg of textile material treated (Prasad 2004). The water used in India comes from groundwater and rivers, and the treated effluent may often not even be used as irrigation in agriculture. It is therefore important to consider pollution prevention to decrease the ecological footprint of the Indian textile industry. My source of inspiration for this thesis has been to look at what encourages or pressures some textile producers into being more eco-friendly, with a hope that Indian rivers some day soon may be natural blue or green and not multi-coloured as they are today.

## 1.1 Aim of Research

The purpose of this thesis is to get knowledge about the prerequisites for and the forces behind a more environmentally friendly textile production in India. I have chosen to study two cases of firms which aspire to be 'green' (Welspun and Continental) to get knowledge about why a textile producer may have more environmentally friendly production than comparable producers and stricter criteria for the production than the law requires. The quote in the beginning of this chapter is from Welspun's homepage and it presents their commitment to be environmental responsible. It is a common assumption that industry does not make the production more environmentally friendly before law enforces it to. I will argue that this is not always the case and investigate what might be other reasons. By looking at the two

cases in a context, I will try to understand what might have influenced these suppliers into being more environmentally friendly.

I have chosen to do a study in India because it is one of the most important textile-producing countries, and as a developing country India is challenged by how to govern a large and complex textile industry. I asked IKEA to recommend a case for me, because they have a strict policy regarding the environmental impact of the production, and I thought that they would be able to find a good case to study. I agreed with them to study two different producers, one small and one big, since it would make me able to see if different pressure points are important to the two producers.

There are many different opinions on what encourages environmental upgrading of production. Some argue that there should be more government regulation while others argue that it is more important to give information and persuade people to go in the right direction. Others emphasize the importance of international trade, civil regulation or a consumer-driven pressure. “The need must (...) be to identify and enhance the drives of corporations’ more progressive engagement in the vision of sustainable development” (Zadek 2004:8). To get more knowledge about the drivers to environmentally sound textile production in India, I will analyse 13 different explanatory factors to why Welspun and Continental are more environmentally sound than comparable producers in India. I started working on my thesis, having several research questions (reflected in the interview guide, see appendix), but gradually I summed them up in one: **How can different internal and external factors explain the eco-friendly actions of Welspun and Continental and who are the stakeholders behind these factors?**

What is an eco-friendly action can certainly be discussed. Gonzales-Benito and Gonzales-Benito distinguish between three different categories of environmental practices: Planning and organizational practices, operational practices and communicational practices (2006:88-9). The planning and organizational practices (like for instance environmental management systems) does not in itself mitigate environmental damage, but is often necessary to implement operational practices in a coordinated and systematized basis. Gonzales-Benito and Gonzales-Benito recognize



that “planning and organizational practices can exert a significant impact on public opinion”. This could in the worst case lead to “greenwash” where communicational practices are used “more or less complacent and propagandistic objectives” (Gonzales-Benito & Gonzales-Benito 2006:89).

The practices which can actually change the environmental performance of the company are the operational practices. The operational practices imply changes in the production and operation system, like designing and developing environmentally conscious products or develop and implement more environmentally conscious manufacturing and operational methods and processes to reduce resource consumption and waste generation. The operational practices are often less perceivable by the social and economic environment, than the communicational practices (Gonzales-Benito & Gonzales-Benito 2006:89). It is often difficult to get information about the actual operational practice and many attempts to rate how environmentally proactive companies are, are based mainly on their CSR-reports. It would often be too time-consuming to visit the factories and do research on the operational practices, in addition to that this kind of information is often considered “business-sensitive information”. Acknowledging these difficulties I wanted to look at the operational practices at my case studies, not only to see if they actually are environmentally friendly, but also to see if there are any specific drivers to changes in operational practices. I will not go into the discussion on what can be considered to be environmentally sound production, because I find this discussion to be outside the scope of this thesis. However, I will mention that I consider a company to be environmental active when it constantly looks for new possibilities to improve environmental management and the process of production, instead of just applying end-of-pipe solutions in accordance with governmental limits.

## 1.2 Previous Research

Literature on environmental upgrading in textile industry is usually focused on technical solutions, but not on factors that lead to such decisions. Environmental problems related specifically to the textile industry in India are also poorly discussed<sup>1</sup>. The few books on this topic concentrate on effluent treatment plants and not on pollution prevention in production. The United Nations Industrial Development Organization (UNIDO) carried out a one year project with 22 Small and medium scale enterprises (SMEs) in four Asian countries, including textile companies in India, to investigate how SMEs can meet corporate social responsibility (CSR) requirements. The information from this study used in this thesis, is referred to Luken and Staes who wrote an article about the study. Since 2000 six CSR surveys have been conducted in India. I have only been able to acquire one of these surveys (Kumar et al. 2001), and have read comments on the others by Balasubramanian et al. (2005:88). They argue there is a need for more empirical work or case study-based research using qualitative techniques to find out what companies are actually doing (2005). My thesis is an attempt to find out what Welspun and Continental are actually doing and what factors might have encouraged or pressured them into being more eco-friendly.

## 1.3 The Organization of the Thesis

After the introduction I start with my theoretical framework in chapter 2 and present my choice of methodology in chapter 3. In chapter 4 I have given a short presentation of the socio-cultural context for my case study factories, with environmental regulations and described what is characteristic for the Indian textile industry. After placing my case study factories in relation to its Indian context, I continue with the presentation of Welspun and Continental in chapter 5. Based on a

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<sup>1</sup> One indicator that not so much research is done on environmental upgrading in the Indian textile industry is that someone from UNIDO called Centre for Science and environment in Delhi while I was there, to ask if they had done any research on this topic. They answered that I was working on a report...

review of literature on what encourages or pressures industry into being more eco-friendly, I have chosen 13 explaining factors presented in chapter 6 which I use to explain my case study in chapter 7. Some of the explanations are related, but I found it useful to investigate one explanation at a time. I have divided the explanations into external and internal factors, to get a better overview and see more clearly how they are related. In the end of the analysis I will give some concluding theoretical remarks. In chapter 8 I will give a short summary and a few concluding remarks on this thesis.

## 2. Theoretical Framework

The challenge of any researcher is to find a theory that is useful to frame his/her research. As a student on an interdisciplinary course I found it a great challenge to decide on a theory. Instead of letting a theory guide my research I have had an open mind from the beginning, looking out for what evidence I could find to answer my research question. After the collection of evidence, I have decided on the theoretical framework I find useful to analyse the evidence. The advantage of this exploratory approach is that I can describe and explain the evidence as I interpret them, instead of trying to make the evidence fit into a theory. The reality is too complex to fit into theory. However, that is why we have theory in the first place. It is impossible to explain the reality in all its complexity and it is therefore necessary to extract and highlight some information to arrive at an explanation. The advantage of simplifying the reality by applying concepts to it, is that we are able to explain the empirical evidence. The challenge for me has been to find a theoretical perspective that is broad enough to include the evidence I find relevant and narrow enough to guide the analysis of evidence.

Agency and structure are fundamental issues in the study of social life. They revolve around the relationship between individuals and the social systems in which they participate. In particular, there is disagreement over how much individuals exhibit the capacity for agency by acting independently of the constraints imposed by social systems (Johnson 2000:6)

The age-old question that has preoccupied social scientist regarding the relative weight that should be accorded to structure and agency, and the relationship between them has been a useful starting point for me. With a background in economics I am influenced by the perspective of agent as the rational, profit-maximising individual. The problem with an economic perspective is that it is not well equipped to understand the significance of context. The context and structure are usually

emphasized in social science perspectives<sup>2</sup>. To simplify the debate on structure and agency, the two opposing viewpoints are summarized as follows:

**Economic:** Actors are the central theoretical element in social systems and social structure is a result and consequence of the actions and activities committed.

**Social science:** Actors are socialised and embedded into social structure and institutions that may constrain or enable and generally shape the individuals' dispositions towards and capacities for action, and this social structure should be taken as the primary and most significant theoretical element.

I agree with Prakash that “‘agents’ have some (not complete) autonomy in pursuing beyond-compliance policies; external ‘structures’ alone cannot provide fully specified explanations” (Prakash 2001:287). I therefore attempt to reconcile the notions of ‘social structure’, such as institutions and norms that shape the actions of individuals in society, with the notion of ‘human agency’ where agents are seen as having a free will and being capable of making a difference in and changing the social systems they inhabit.

## 2.1 In the Middle Ground

In the analysis I will try to explain the behaviour of the two different agents Welspun and Continental. Why have these made their choice to be more environmentally friendly? Who/what creates the structure influencing Welspun and Continental as agents to be more environmentally friendly? Different companies face distinct set of pressure, opportunities and other stimuli which may influence their behaviour in different ways. I want to look at factors that lead to higher levels of environmental performance, in Utting’s word ‘best practice’.

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<sup>2</sup> Berger & Luckmann and Pierre Bourdieu may be considered to be among the key contributors to the structure/agency theory.

The analysis of the factors underpinning best practice can be very limited in the sense that technical, managerial and financial aspects tend to be emphasized while certain key institutional and political aspects are often ignored (Utting 2002:276).

I interpret Utting's statement as a critique of focusing too much on agency at the expense of structure. 'Key institutional and political aspects' can be understood as structural explanations, while 'technical, managerial and financial aspects' are usually under the realm of the economic perspective with focus on agency. Prakash, on the other hand argues that:

Existing explanations based on factors external to firms are under-specified and a focus on internal dynamic is also required (...) Though factors external to firms create incentives and expectations for managers, intra-firm policies influences how managers perceive and interpret external pressures and act upon them (Prakash 2001:286).

I interpret Prakash's statement that he wants to focus more on managers as agents, while at the same time acknowledging the importance of structure (provided by external pressure).

The two different viewpoints of Utting and Prakash are neither of them extreme, but represent a more social science approach and a more economist approach. I want to operate in the middle ground and draw on the perspective of both of them, to see which one explain my cases best. I don't want to prejudge the issue and decide to focus on either the rational profit-maximising agent or on structural explanations, but to see if any or both of these perspectives can explain my case studies. I started this study with an open mind and wanted to look for evidence of both perspectives and see what I could find. Being informed by the two different perspectives, I will not force myself to say that only one of them is right.

A theoretical problem with my approach is that the two different perspectives may be seen as part of two different paradigms. The economic perspective with rational-agents can be placed in the paradigm of post-positivism, while a perspective with more emphasize on structure is in the constructivist paradigm. The choice of a paradigm has consequences for how we understand the nature of knowledge and therefore what kind of methodology we use to acquire this knowledge. I do not have any hypothesis that I try to verify or falsify as is usual in the positivism and post-

positivism paradigms. My exploratory approach is more within the constructivist paradigm with focus on interpretation and where “knowledge consists of those constructions about which there is relative consensus” (Lincoln and Guba 1994:113).

## 2.2 Agency/Structure and the Empirical Reality

Many arguments I use in the thesis are based on actors taking rational choices, but I can still see some structures encouraging or constraining more environmentally friendly production. In the first place it is not easy to distinguish theoretically what is what of agents and structure and secondly it is difficult to relate agent and structure to the empirical reality, since these are theoretical concepts. It complicates the analysis that in reality the structures are manifested in practice by actors. In my case studies there are a number of important actors that creates the structures for the key actors, Welspun and Continental. I will use two examples to show how closely related agency and structure are, which in turn makes it difficult to distinguish between them.

### *Example A: Managers and Routines*

Managers are one of the important actors in my case studies. I assume that managers are (usually) fully rational and have clear expectations about the future costs and benefits of a policy, but the outcome may not always be as expected. Managers may lack information to see the outcome of a policy or they may perceive some factors wrongly. I still view managers as rational actors, because I assume that they want to make rational decisions. But I recognize that external ‘structures’ in their turn may influence the actions of managers. Sometimes these structures can be difficult to notice. It can, for instance, be considered rational to develop some routines, because then you don’t have to go through all information again in a similar situation. Business decision often have to be taken within a limited time-frame and ‘intuition’ based on previous experience can make a manager able to make a fast decision. However, routines can be a structural constraint to a more environmental friendly production, since this outcome often is dependent on making a different decision than before. In this example the manager is the agent and I could argue that the

limited time-frame to make a decision is a structural constraint provided by the company's owner or shareholders to the manager. There can be other structural explanations to why the manager does not decide to focus on environmentally friendly production. Suppose the manager is a supply-chain manager and tries to include environmental criteria in the choice of suppliers. Preuss argues that "the structural constraints under which supply chain manager are working (...) crowd out attention to 'softer' issues of management, such as the natural environment" (2005:138). He argues that middle managers relatively low status and the reactive nature of the supply function, which are reinforced by performance measurement criteria that privilege economic criteria, are structural constraints. The manager as an agent is constrained by organisation structure, but he could try to convince his boss that environmental criteria should be prioritised higher as a supply performance criteria. The boss is providing the structural constraint to privilege economic criteria, but he may on the other hand be constrained by the structure provided by his competitors who are also not prioritizing any environmental criteria.

### *Example B: The Terms of Orders*

Both producers and buyers are agents. The buyers provide a structure for the producers, where the producers have many different and short-term orders and where the buyers demand increasingly cheaper goods and shorter lead-times. At the same time western consumers are providing the structure for buyers to demand cheap products. It could be argued that buyers could influence consumers through PR and advertising into demanding more environmentally friendly products at a higher price. Utting argues that 'cheap consumerism' restrict the "scope for expanding so-called ethical consumer markets for socially and environmentally produced products, and partly explain the stubbornness of fair trade and ethical investment markets to break out of their very niche status" (2005b:18). Are the terms of orders restricted by structures or is it possible for buyers or producers to change the terms?



## 2.3 Operationalizing Concepts of Agency and Structure

As I have shown in previous examples it can be very difficult to distinguish between agency and structure when looking at empirical evidence. I have therefore chosen to operationalize the concepts of agency and structure, by distinguishing between external and internal factors for the producers. It should be noticed that external/internal factors do not map directly to structure/agency. I do not consider external factors to be the same as structures, although factors that are mainly external can be understood to be given as opposed to internal factors that the producers as an agent have more opportunity to change. This does not mean that the producer has full control over internal factors, but has more opportunity to change the internal factors. It can be argued that the producer in some cases may influence external factors, for instance, by collaborating with the government to influence government policy, but in theory it should be easier to have control over internal factors. Some internal factors may seem to be given, like for instance internationalisation or company size, but it is possible to decide to expand the company or make it smaller, and to focus on domestic buyers instead of foreign or opposite. These changes would probably not happen overnight, but are still internal factors the company can control to some extent.

In order to operationalize the concept of agent, it may be useful to introduce the term 'stakeholder'. What is the difference between the two? I will argue that stakeholders are a concept more related to the empirical reality, while agency is a theoretical concept. In this way the concept of stakeholder can be seen as operationalizing the concept of agents. "A stakeholder in an organization is...any group or individual who can affect, or is affected by, the achievement of the organization's objectives" (Edward Freeman quoted in Crane & Matten 2004:50). Stakeholders are different agents who have more or less power and interest in influencing the companies. In addition to Welspun, Continental and IKEA there are other stakeholders influencing the decision made at my case studies. One interesting aspect of stakeholders is whether any of them have (and uses) power to influence the decision made on how environmentally sound the production is. In the analysis I will relate the stakeholders to the external and internal factors. Some stakeholders create the environment the

firms have to operate within, while other stakeholders are part of the internal resources. In various ways the stakeholders create the structure which the firms have to respond to. For instance, the government is an agent, but the government policy is a structure for the firm. In the same way, reputation is structure, but the civil society can as an agent manifest the reputation.

Operationalizing of my theoretical approach is therefore achieved by stating the research question as: “How can different internal and external factors explain the eco-friendly actions of Welspun and Continental and who are the stakeholders behind these factors?” In the analysis I will try to answer this question and in the summary of analysis 7.14, I will look at how the internal and external factors relate to structure and agency.

### **3. Some Methodological Reflections**

In this chapter I will present and evaluate the strategy I have used to collect data for my research. I will show what choices I have made during my research and give the reasons for them. My research question is a ‘how’ question and according to Yin “case studies are the preferred strategy when ‘how’ and ‘why’ questions are being posed, when the investigator has little control over the events, and when the focus is on a contemporary phenomenon within some real-life context” (1994:1). A case study is a good strategy to explain cause and effect of a contemporary social phenomenon, like forces behind a more environmentally friendly textile production in India. It also gives the advantage of incorporating the context as part of the study. In my case, it is the interlinkages between environmentally friendly producers and context that makes the case of the textile producers in India particularly interesting. In the analysis I will try to describe and explain the phenomenon I have studied.

#### **3.1 The Choice of Case Studies**

I wanted to do a case study in India because it is one of the most important textile-producing countries and as a developing country India is challenged by how to govern a large and complex textile industry. China could be interesting to study for the same reasons, but I choose India because growing up in the neighbouring countries Nepal and Bhutan, I had already been familiar with the Indian culture and could therefore be more able to avoid culture-barriers. Another reason for choosing India instead of China is that Indians in general speak more fluently English than most Chinese do, and it is easier to do interviews without a translator. I wanted my case study factories to be composite mills<sup>3</sup>, because it is easier to have control over the whole production in composite mills and therefore consider pollution prevention in the process. It would complicate the case study if I had to consider a sub-supplier

as well. If the polluting process were done by sub-suppliers it would not make much sense to study the producers as a good case, without also considering the sub-supplier. Wet-processing is the most polluting part of textile production, and I wanted this to be included in my case study factories in order to study how environmentally friendly they are.

I chose to study two different producers, to investigate if they are encouraged or pressured by different factors. The plan was to make interviews with different stakeholders (at the two factories), to get knowledge about previous changes in production and look at how the production is done today. I would look for linkages between changes in the production of the cases and different internal and external factors. It turned out that I would not be able to spend so much time at the two case studies as I had hoped and I was also not able to do interviews with a lot of different stakeholders. My primary sources are therefore interviews with managers at Welspun and Continental, and observation from my factory visits. Information on some stakeholders through interviews, conversation, observation and text suited as secondary sources.

## 3.2 Planned Coincidences

After I decided the aim of my study, I wondered how I would manage to get the information I needed. In January I had a plan of what I wanted to do and where I wanted to go, but didn't know how I would get the right contacts. Personal contacts in the field function as door-openers and I didn't have any personal contacts I could use. Due to some coincidences I managed to get the necessary contacts after all.

### *Coincidence 1:*

I attended a meeting in Oslo (at 'Tekstilpanelet') where Bjørn Frithiof from IKEA held a presentation about IKEA's CSR. When he mentioned that they have some

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<sup>3</sup> Units having facilities for manufacturing yarn and fabric in addition to processing of textiles are classified as

textile-producers in India I got the idea that maybe IKEA could help me to get in touch with some producers that could be used as good cases in my thesis. Since IKEA has a strict policy regarding the environmental impact of the production, I thought that they would be able to recommend a good case to study. I asked Frithiof after the presentation, he gave me his card and asked me to send a project-description. After I send a project-description, he contacted the IKEA office in India and they agreed that I could study some of their producers. In March I was in Delhi on a course at Centre for Science and Environment, and used the opportunity to meet Kajsa Mattson and Rupak Saha at the IKEA office and discussed which producers I should study. They asked me if I wanted to study a small or a big producer. We agreed that it would be a good idea to study one of each, to compare and contrast the differences. I thought a comparison might give me insights that would not be revealed if I only studied one of them, like for instance the relative importance of different external and internal factors.

### *Coincidence 2:*

While I studied at Centre for Science and Environment in Delhi, I went with some friends to Shimla by train (12 hours each way) for a weekend. To be on a train in India can be very social and we met a lot of people, among them I got to know a man who had been a manager at a textile factory. One day he took me to one of the factories of his cousin, so I could have a look at the production. When I returned to India to do field work, he introduced me to a textile controller, who took me to another factory. Both of these visits were important for me to get an impression of the textile industry in India, and to have some other examples to compare my cases with.

Why have I emphasised these coincidences? Isn't a Master thesis about planning research and then following the plan? I see planning research and doing it as interconnected, you can never plan what opportunities you will get, but you can be open and be places where some opportunity may turn up, and grab it when it does. I

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composite mills.

also think that because I already had a plan and a driving interest, I did not overlook the opportunities when they turned up.

### 3.3 Collection of Data

The field work was done in one month (September-October 2005). I stayed most of the time in Delhi, and spent one day at each of the case study factories where I was able to look closely at the production. I travelled together with IKEA's employees and I got some knowledge about their work, we talked about the textile industry in India and the factories we were visiting. At the factories I observed the interaction between IKEA's employees with managers at Continental and Welspun.

It took more time than expected to get appointments to do the main interviews, and I had to do all of them the last four days I stayed in India. The interview with Mr. Saha had to be done by phone since he did not have time to answer my question until a few hours before I left India. I wrote down all the answers while we talked. The interviews with managers at Welspun and Continental were recorded, in addition to the notes I took during the interview. During all other interviews and conversations I took notes and reconstructed the whole text immediately after.

During my stay in Delhi I visited the offices of Textile Committee, Central Pollution Control Board, The Indian Cotton Mills' Federation, Centre for Science and Environment and the Indian Institute of Technology to get information about the context of Welspun and Continental. In addition to the interviews, conversations and observation I collected information from web-pages, newspapers, magazines, and literature. The thought behind collecting information from different sources, is that they would complement each other both in the facts stated and in the different perspectives on the case studies and their context.

### 3.4 Primary Sources

The core interviews were semi-structured and went on between 45 and 90 minutes. The interviews were based on an interview guide (see appendix) and I had stressed

the most important question in case I would not have time to ask all questions. The interview at Welspun was similar to a dialogue, while the interview at Continental was less conversational due to language problems. During the interviews I followed up on some of the answers. The background research I had done proved to be useful to understand the answers and follow them up. "With a less formal, less standardized and more interactive kind of interview, the researcher has a much better chance of learning from the respondents what the different significances of circumstances are for them" (Sayer 1992:245). Some of my questions proved to be more important than others, and gave me a lot of information. Not all of my questions were satisfactory answered, but instead of pushing the respondents to answer questions they did not find interesting, I focused on getting their opinion on topics they were interested to talk about. I found reading Kvale's 'InterViews' as a good preparation for my interviews. It made me aware of how much it is possible to improve the quality of an interview, for instance on what kind of questions you ask. He also argues that "the interviewer's ability to listen actively to what the interviewee says can be more important than the specific mastery of questioning techniques" (Kvale1996:132). I know I could work a lot more to improve my questioning techniques, but at least my active listening went quite well. Knutsen states that "a good way of starting the interviews was to let people talk freely about the history and background of their company" (Knutsen, 1996:80). Following her example I got good results. I started the interviews by asking "Could you tell me the story of how your company became environmentally sound?" and the conversation started immediately. At both interviews I was positively surprised by the degree of openness of the informants. I had heard that managers often could be sceptical about answering questions, due to fierce competition in the industry and the controversies surrounding environmental issues in production. The managers did not decline to answer any questions, and were very frank about their own opinions. The only exception was the managers' opinions on the government. At one factory I got information I was told to use anonymously, so that they would not get in any problem with the government. In the thesis I have referred to (anon.) when information was given anonymously. I had no problem to get information about the production, even pollution indicators, which could be considered to be sensitive information. One reason for this could be that they have nothing to hide because they are environmentally friendly. Another reason

is that I could probably get some of the same information from the Pollution Control Board since the factories environmental reports are official.

Knutson has done research among Dyestuff producers in India and states that “in many cases the impression was that the reason why one could be shown around, was that one was not a technical person” (Knutsen 1996:84). I did not find my technical knowledge to be of any threat, rather the opposite; they seemed to be interested in showing me the production because I could understand different processes. The production is important to them and I think my genuine interest in the production processes made the managers more interested in answering my other questions.

### 3.5 Secondary Sources

The interview with IKEA’s employee Mr. Saha, the Environmental report from Continental, Welspun’s homepage and some papers from Welspun are the secondary sources I have about Welspun and Continental. In addition I have collected a lot of secondary sources concerning the textile industry in India in general, to be able to see the cases in a context. I have read official documents from the Textile Committee and the Central Pollution Control Board. Visiting their offices also gave me some impression of how these institutions work. Interview and conversation with professors in textile technology at Indian Institute for Technology were helpful to get knowledge about the textile industry in India and its environmental problems. The conversation with managers at other factories than my case studies and with Mr. Nair, the Secretary General at Confederation of Indian Textile Industry gave me their view on the topic. The conversations were similar to interviews; I had prepared questions and took notes while we talked. At Centre for Science and Environment I got opinions on the topic from people working at the NGO, and was able to read their books on pollution in relation to textile production. This is not primarily a qualitative study but I have included some statistics, mostly to relate my cases to the context of the Indian textile industry. Other secondary sources are literature, IKEA’s homepage and a presentation about IKEA by Frithiof.



### 3.6 Validity and Reliability

Validity is important because “it points to a question that has to be answered in one way or another: Are these findings sufficiently authentic that I may trust myself in acting on their implications?” (Lincoln and Guba 2000:178). How can I make sure that my research is valid enough to draw any conclusions? Yin argues that the case study method advocates combining information from various sources in what he calls triangulation (Yin 1994). Relying simply on one source of evidence, as for instance a number of interviews, makes the study biased towards the particular opinions and agendas of the informant. This could be a problem in my case, since the main informants (from Welspun, Continental and IKEA) could have the same agenda, namely to give a good impression of the producers. Ideally I should have other sources of information, but I have tried to compensate for this by analysing the information with the potential bias in mind, supplementing with my observations and comparing with similar cases. I did not get the impression that the managers were withholding any information since they answered all my questions, also Mr. Harsharan and Mr. Narain spoke openly with me. The only person sceptical towards answering my questions was Mr. Saha. He had to get the questions in advance to check if he would be allowed by IKEA to answer them. It turned out that IKEA did not have any problem with him answering my questions. Ideally I should have more secondary sources on my case studies, like for instance interviews with local NGOs, someone from a local community, workers and a controller working for Pollution Control Board. It would also have been useful to have a second interview with managers at my case studies, since I got some new questions during the work on the thesis. Restricted by the time-frame of my master-thesis, I had to decide that at some point I had enough information.

To ensure reliability it should be possible for another researcher to repeat all the procedures I have made and get the same result. In case studies, this is not possible, since cases are dependent on the context which changes all the time. And even if another researcher studied the same case, he might not notice the same empirical evidence or interpret them in the same way. However, this only raises the importance of reliability in a case study. Yin’s solution to the reliability problem is “to make sure as many steps as operational as possible and to conduct research as if someone

were always looking over your shoulder” (1994:37). This to a certain degree can be made possible through the multiple sources of information, but in the end interpretation of the ‘evidence’ are highly dependent on the researchers and his/her background. I find it challenging to be aware of how my perspective may have influenced my interpretation of evidence and choices of what are relevant evidence. Thagaard argues that issues concerning reliability in qualitative methods are ultimately a matter of the researcher reflecting on the context in which the data is being collected. Also, the researcher must be aware of the fact that his or her way of interacting with the informant may have significance for what kind of information he or she is able to get (Thagaard 2002). During my interviews I tried to follow up on the question my respondent found interesting, to get their point of view. It was a challenge to pose questions so open that the respondent should not be able to guess what answer I would like to hear, and at the same time, narrowing the question enough to actually get some useful information. Language could be a potential error in the interviews, especially since English is neither mine nor the respondents’ mother tongue. At Welspun I did not find language to be any barrier, but there were some language problems during the interview at Continental and Mr. Narain had to translate some of the questions that the manager didn’t understand when I asked them. The presence of Mr. Narain as third party, representing IKEA, could be seen as negative for getting a more objective interview, since his presence could influence the answers of Continental’s manager. I will argue that that his presence compensated the eventual influencing effect because I probably got more information from the interview than if he had not been there. Technical language could also be a problem in the interviews, but since I had some knowledge about textile production, I did not find this to be an important barrier. My personal view may have influenced what evidence I have noticed during my research and how I have interpreted this evidence. Being aware of my potential bias, I hope that I have been able to avoid it as much as possible. In the text I have tried to distinguish between what is evidence and what is my interpretation of evidence. I tried to do my research with an open mind and decided on theory after collecting the data. In this way I avoided looking only for evidence fitting to a theory and overlooking other evidences.

### 3.7 Transferability to Other Similar Cases

While information from a qualitative case study is not sufficient to make statistical generalisations, it allows making analytic generalisations where theory is the vehicle by which the case study findings are analytically generalised (Yin 1994:36). The question of analytic generalisation is closely linked to what Thagaard refers to as transferability (“overførbarhet”) of the research findings, and the concerns whether the findings of the study is of relevance beyond the specific context of the research questions. This connection between the interpretation of data and the theoretical framework is then a question of whether the findings in this study may have relevance for other similar studies but in another context (Thagaard 2002: 187-8). The best outcome of my study would be if there are any lessons to be learned from the two cases studied, that might help encourage other producers to become more environmentally friendly.

## 4. Background: India and the Textile Industry

In this chapter I will introduce the socio-cultural context of Welspun and Continental. I will briefly present environmental regulation in India, and describe what is characteristic for the textile industry in India. The industry has been in a changing environment lately with economic reforms initiated in 1991 and changes in international trade agreements. The introduction of environmental standards and eco-labels are also visible.

### 4.1 Contemporary India and the Importance of the Textile Industry

The textile industry in India (including the garment industry) is vital to the economy of the country. It contributes to over 6 percent of gross domestic product (Panthaki 2005a) and earns 21 percent of the total foreign exchange earnings of the country (Office of Textile Commissioner 2004:17). India's major export markets for textiles are the United States and EU, which account for 46 percent of its textile export (Shetty 2001:4-7). A **Vision 2010** for textiles formulated by the government after intensive interaction with the industry and export promotion councils aims to increase India's share in the world's textile trade from the current 4 percent to 8 percent by 2010 (Vadhani 2005a).

### 4.2 Environmental Legislation and Enforcement

India was one of the first countries in the world that included environmental protection as a principal right for all its inhabitants in her Constitution (Article 48A). The regulatory framework<sup>4</sup> governing the environmental compliance of textile

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<sup>4</sup> (Water) Prevention and Control of Pollution Act 1974, Water Cess Act 1977, (Air) Prevention and Control of Pollution Act 1981, Environment Protection Act 1986.

manufacturing activities in India has been in place for the past many years. The Bhopal-tragedy in 1984 made the civil society and media more aware of the potential environmental dangers of industrial production, which again lead to environmental legislation (Ruud 2000:240). The Ministry of Environment and Forests was established in 1985 and is together with the Government of India and the state Governments responsible for the formulation of regulations and the overall monitoring of compliance of the industry to such standards. The Central Pollution Control Board (CPCB) has the executive responsibility to stop industrial pollution and the monitoring of compliance is done by different State Pollution Control Boards. The environmental laws give CPCB the authority to require information from the industry, to test the effluent and to fine or close companies that do not comply with the law. Since 1992, making an environmental audit has been mandatory for all industries covered by the various pollution acts (Kjellberg & Banik 2000:2). Before an industrial project is started it is necessary to apply for consent and at least every second year the company need to renew an effluent consent (Ruud 2000:243)

Unfortunately the policies and institutions for controlling pollution are weak and still in a nascent stage. The regulatory mechanism has failed to control industrial pollution.

Despite the existence of stringent environmental laws/regulations, the compliance level by the Indian textile industry has not been very satisfactory. It has been common knowledge that a large number of textiles units, particularly processing, fail to meet many of these norms (Textile Committee 2002:61-62).

Professor Chavan at IIT in Delhi said that the environmental problems are greater in decentralised sector, than in organised sector. This may be because there are many small textile producers in the decentralised sector in India<sup>5</sup> and Stuligross argues that India's national and state governments do not have the manpower to enforce pollution laws (1999:395). Although environmental law is not always enforced, it

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<sup>5</sup> 90 percent of Indian industrial firms e argues employ twenty-five or fewer workers (Stuligross 1999:394).

must have some effect because Sankar argues that it is a competitive problem that the textile industry faces court orders requiring the bleaching and dyeing units to comply with the prescribed standards or face closures, and payment of compensation to past damages (2001:289).

### 4.3 Cottage Industry and Composite Mills

It is characteristic for the Indian textile industry that it is diversified with an unorganized sector inter-mingled with the organized sector (Panthaki 2005a). This makes it very complicated to get an overview of the industry and Textile Committee admits that more surveys needs to be done:

One of the major problems faced by the government and the industry has been non-availability of reliable data on the vital sector on the textile industry...One of the thrust areas will be to develop data on the decentralized sector (Textile Committee<sup>6</sup> 2002:23).

The companies in the decentralised sector are often small-scale and lack detailed information about eco-standards and possible substitutes, technical know-how and, of course, financial resources (Textile Committee 1994:17). An article in 'Down to Earth' states that the small-scale industries sector pays no heed to environmental regulations and that effluents are discharged sans treatment in the unregulated textile dyeing sector (DTE 2005:34).

According to Shetty the majority of textile machines in India are more than 10 years old. Most looms are outdated and produce mostly low-value unfinished fabrics. The dyeing and finishing segment is significantly underdeveloped in terms of technology, leading to low product quality and environmental problems (Shetty 2001). There are in other words great potential to update the technology level in Indian textile industry. Machines in textile industry may stay in use over a long period and it is a big investment to buy new machines. The textile processing (dyeing and finishing)

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<sup>6</sup> The Textile Committee is a statutory body constituted under the Textiles Committee Act, 1963. A Committee of 29 members representing the government, industry and trade and TRAs manages the organisation.

sector consists of a large number of small units located in and around the powerloom and handloom centres. The fabric and finishing segment consists of 12,596 process houses. Of these are only between 83 and 133 composite mills in the organised sector (Shetty 2001; Textile Committee 2001:8).

## 4.4 Economic Reforms

In the early 1990s, India incurred huge economic problems and the Government of India initiated economic reforms in 1991 after signing a standby arrangement with the IMF to undertake fiscal and structural reforms. These reforms have led to stronger economic growth, higher foreign investment inflow and expanded trade, but it is debatable if the reforms have had a negative or positive impact on the environment. I will not go into the discussion about trade and environment here, but it is obvious that India's opening to a world market has had and still will have great consequences for the textile industry and the environment. FDI in India's textile industry has been low largely because the Government of India first allowed FDI rather late in the mid-1990s, when most funds were being invested in Southeast Asian countries (Shetty 2001:3-9).

Textile and apparel trade was for many years largely governed by the terms of the 1974 Multifiber Arrangement (MFA). On January 1, 1995, the Agreement on Textiles and Clothing (ATC) entered into force as part of the WTO agreements and replaced the MFA. The ATC provided for the elimination of quotas and complete 'integration' of textiles and apparel into the WTO regime and the transition period ended on January 1, 2005. This has given India the possibility to export more than before, but has also given India greater competition from China. In addition, many Indians argue that Western countries will provide new trade barriers because of environmental standards. Vadhani states that Western European economies protect their industry in the name of environmental barriers and suggests that Eco-labelling of products of very superior quality can help Indian crack the barriers (2005b).

Both of my case studies are composite mills in the organised sector and they are mainly exporting. The difference between the two cases is that one company is small-scale, while the other is among the largest producers in the world. In the next

chapter I will continue to introduce my case studies. The choice of case studies has consequences for which parts of the textile industry I will focus on in this thesis. I acknowledge that it would be interesting to look at drivers for eco-friendly production in the unorganised sector and among companies that produce for the domestic market, but due to the case studies my main focus will be on the differences between a small or large producer and on how important it is to be an exporting company.



## **5. Presentation of Case Studies**

Before I start the analysis I will in this chapter introduce my case studies Welspun and Continental. I present here mainly the basic facts about the producers, and the analysis will have some additional information from the interviews. Welspun and Continental have several different stakeholders influencing them. From the beginning I assumed that IKEA as a buyer would be one of the important stakeholders. My focus on IKEA in this thesis is also due to the fact that they have given me the possibility to do research on the relationship between IKEA and their suppliers. I will therefore give a short presentation on their collaboration in this chapter. By choosing Welspun and Continental as case studies, I assumed them to be “good cases”. I will in this chapter give examples from the textile production at both factories and argue why I find them to be good cases. In the end I will give an overview of Welspun and Continental’s stakeholders. Together with the previous chapter on India and the textile industry, this presentation provides the background information to proceed to the analysis.

### **5.1 Welspun and Continental**

Welspun group has grown rapidly to become a market leader in Terry towels since its inception in 1985 with a small textile unit. The Welspun group has more than 10.000 employees and 50.000 shareholders (Welspun 2006a). The factory I visited was established in 1993-4 and is a large composite mill with 1200 workers on each working shift, 3000 workers altogether. It is located in Vapi, an industrial area in Gujarat. Welspun was at the time of the interview building a new factory in Anjar. Welspun is the third largest producers in the world on terry-towels and produces 12000 MT of towels and 16000 MT of yarn annually. 93% of Welspun’s production is exported, while 5 % is sold locally (to hotels and in Welspun’s new domestic home linen brand “Spaces”, with shops expanding in India) and 2 % defect. According to Mr. Harsharan (IKEA), Welspun have huge capacity, always delivers on time and have slightly higher price than other Indian companies. The fixed costs are higher because of higher salaries (more educated employees). Among Welspun’s

biggest buyers are Wal-Mart, Kohl's, Federated, Target, IKEA, Tesco, Goezze and Sheridan. IKEA started to buy from Welspun in 1996 and IKEA's share of production is 12 % (Mr. Sarovar).

Continental is engaged in dyeing of cotton yarn and stitching and finishing of fabric to manufacture Home Furnishing items (Continental 2005:1). Continental was established in 1991 and the factory was placed in a small, congested area (Mr. Garg). They moved to a new factory in 1999. Continental is situated in Dundahera Industrial Area (outside Delhi) and increasingly more companies are starting production in this area. I asked Mr. Narain if the area is considered to be a cluster-area and he said, "not yet, but it is going to be". Although it is an industrial area, people live around the factories, as is usual in India. The factory has 250 workers, which is considered to be a medium-scale factory in India, but a small-scale factory globally. Since Continental are using handlooms, the work effort is very high compared to using machines, and the same amount of textiles could have been produced on a much smaller factory with machines. A sign by the entrance has information about how much pollution the factory generates. This is changed every year when they make a new environmental rapport. Continental has been supplying IKEA since 1995 and from 1998 IKEA has been their major buyer. They are shipping almost 50 to 60 percent of their capacity to IKEA (Mr. Narain).

IKEA has 20 textile suppliers in India; most of them are of the same size as Continental, while approximately 10-15 % of the suppliers are larger (Mr. Saha). Mr. Harsharan (IKEA) said that Welspun differs from many other producers in India because they are very professional. IKEA has a team with three people working in close contact with producers. The business support is handling the logistic (how much capacity the suppliers have, delivery plans), another is handling the price negotiations while the third one is responsible for quality development. They visit the suppliers regularly and often more than once a month. I accompanied two of these employees to Welspun and Continental and I could observe how they were dealing with the supplier. After each visit they wrote a business-report, on what they have discussed and agreed on. Mr. Narain, quality developer, usually visits Continental once or twice a month, when there is something to discuss, like an order. Mr. Harsharan, responsible for logistics, does not visit Welspun that often, because

IKEA has less to discuss with Welspun than with Continental. When I asked Mr. Agarwal if Continental got any technical assistance from IKEA, he said that there are different types of seminars run by IKEA and that if they have any problems in developing products or production they can call their IKEA contact whenever they want to get assistance.

All three in IKEA's support team can see if the supplier follows safety and environment criteria while visiting the plant, but the one who is responsible for quality management has more knowledge about textile production and can give advice on technical solutions to environmental problems caused by the production. When I visited Welspun, Mr. Harsharan (who is responsible for logistic) was checking that safety criteria was as they should be at the plant. I got the impression that IKEA's employees have a good contact with IKEA's suppliers. At the business meeting between managers at Welspun and Mr. Harsharan, he told them about IKEA's future demand, what orders they will have in the next 6 months. 84 weeks of orders gives a good overview and Welspun can plan ahead if they want to produce something before they have to (and store it) if they get some other big orders. At the same time, Mr. Harsharan says that lead time has to come down to maximum 28 days, with one week in process. He mentions that producers in Pakistan have shorter lead-time.

## 5.2 Are Welspun and Continental "Good Cases"?

IKEA's recommendation of them as 'good cases' could be sufficient to argue that Welspun and Continental are more eco-friendly than other similar producers. A comprehensive analysis on how eco-friendly Welspun and Continental are would require more information than I was able to obtain on my factory visits. However, I will give some examples from the production of Welspun and Continental to argue why I consider these companies to be 'good cases'.

Even though both Welspun and Continental have possibilities to work on pollution prevention (for instance start using organic cotton and natural dyes, and recycling water), they both seem to have good knowledge about the environmental impact of their textile production. They are handling and storing chemicals in a proper way and

their effluent treatment plants are state of art. Mr. Saha (IKEA) said that Welspun and Continental differ from other textile producers because they are handling chemicals much better and have better housekeeping. It was tidy on the industrial area, and the chemicals are located in a storeroom, placed accordingly to a system. One of the problems in the textile industry has been that chemicals are not stored properly and empty drums (once containing toxic chemicals) could be reused for other purposes, in the worst case to store drinking water. Lack of knowledge about the danger of different chemicals is a problem in the small scale industry. At Continental empty drums and containers of hazardous chemicals produced as waste in the process are either recycled or kept in secured area.

Some of the most troublesome current areas of concern in the textile industry are the pollution brought about by bleaching, dyeing and printing and finishing of textiles. Bleaching decolorizes coloured impurities and prepares the cloth for further finishing processes such as dyeing or printing. It is still usual to use chlorine to bleach textiles in India. Welspun uses hydro peroxide bleaching, which is much more environmentally friendly. It only leaves water as a residue after reaction is complete.

The amount of dye used depends on the dye is exhausted from the dyebaths which determines the required dyebath ratio. A conventional dyeing machine has a liquor ratio of 1:10-1:12, while a Single-rope machine (best available technology) has a liquor ratio of 1:6 (EC 2003). Welspun has fully computerized and inverter controlled dyeing machines with colour kitchen from Thies (Germany). The bleaching and dyeing is done continuous and the liquor ratio is 1:7. At Continental the yarn is dyed with steam, and some steam is evaporating in the process. They have started to build a new dyeing house, where they will add new technology to their dyeing machines to avoid loss of steam. To dye one kg yarn Continental uses 60-68 litres of water. A conventional jet dyeing machine uses 100-130 l/kg, while the Single-rope jet machine (best available technology) uses 30-70 l/kg (EC 2003). This means that Continental is using a relatively small amount of water to dye their yarn.

Finishing encompasses any of several processes performed on fibre, yarn, or fabric to improve its appearance, texture, or performance. Mechanical finishing is generally more environmentally friendly than chemical finishing. Chemical finishes are not

permanent, as mechanical, and disappear after several washes. A manager at one Indian factory I visited told me that there is an increasing demand for certain finishes that makes the clothes more easily maintained. The last year, 50 % of their export had some kind of finish (anon.). The only finishing Welspun is doing is silicon and cationic softeners (with non-formaldehyde excess and SIBA fix eco.). This is because towels should be soft when a consumer buys them. The softener will disappear after some washes, but most consumers use a softener in addition to washing powder when they wash the towel. Continental does not do any finishing.

At Welspun 8 persons are working in the environmental cell, responsible for the Effluent treatment plant (ETP), and the effluent is monitored hourly. At Continental “the effluent from the process is regularly monitored and accordingly controlled and getting the quality as per the norms given by Pollution Control Board” (Continental 2005). Continental’s treated effluent is used as water in agriculture, but it is unsafe to drink. Welspun’s effluent is not allowed being used for irrigation. The water goes in 5.5 km long pipelines and is discharged in the sea outside Mumbai with governments consent. I have heard about complains from other similar arrangements, where pipelines are not safe and some effluent goes into farmer’s properties. The sludge from the sludge drying beds at Continental is being stored in a temporary sludge storage tank. There is no facility to dump the sludge nearby and it is therefore dumped on the premises. ETP sludge from primary treatment during 2004 was 5573 kg. Process waste was 17688 Kg in 2004 and was being sold to Kabarisi (Continental 2005:5-15 and Mr. Garg). Welspun discharges sludge in an official land filling for hazardous waste.

The magazine ‘Express Textile’ writes about a few companies in India which has started to use biological treatment plants for discharge. One of the companies mentioned is Welspun (The new factory in Anjar), which has been treating effluent since its commission in April 2005. Of the two other companies mentioned, one of them is the big competitor of Welspun, Trident in Ludhiana. Trident started to use the biological treatment plant in December 2004. Three companies are under construction or installation of zero discharge plants (recovery of water). These are Alok Industries in Mumbai, Inditex Processors in Tamil Nadu and KG Denim Group in Tamil Nadu. KG group is one of the biggest and oldest in the Indian textile

industry (Express Textile: 2005). Tamil Nadu is the state with strictest criteria for recovery of water, due to water shortages in the area (Saha).

Most Indian textile producers, who actually have an ETP, only have primary treatment while Welspun and Continental have also secondary and tertiary treatment. Even if Welspun and Continental do not operate with much stricter criteria than the law demands, I have reason to believe that many textile producers do not comply with the law. One difference between the managers at Welspun and managers I have met at other factories, is that at Welspun they seem to take the environmental challenge more seriously and therefore priorities this issue and are actively looking for possibilities to improve their production. This is especially evident in the new factory of Welspun where the equipment is more environmentally friendly than in the old factory.

In India it is usual that each production unit has a power generator, mostly run on diesel. The reason for owning power generators is that electricity infrastructure is not good enough and they can not afford to have black outs (which happen many times every day in Delhi). At Welspun they were in September 2005 using a power-generator fuelled on oil. Welspun has already installed gas based turbines but have been waiting for the gas-line to come since January 2005. When I was there, the pipeline was still 10 km away and they had been told that the pipeline would be there in 2006. The gas based turbines has heat-recovery, will give lesser sulphate content and low NO<sub>x</sub> and availing carbon credit globally, making up for some of the 280 million INR invested. The gas will be cheaper in use than oil, since the price of gas is lower.

Welspun was accredited with ISO 14001 in 2004, all their products are Oeko-tex 100, and they are exploring the EU-label. Continental also has ISO 14001 and both companies have environmental management systems. Not all textile companies in India have an environmental manager and his position in the hierarchy decides how much influence he can have on the production. The environmental manager usually

works with effluent treatment and not pollution prevention. Only a few textile companies in India have got ISO 14001 at the moment<sup>7</sup>. ISO 14001 is considered to be the highest level in IKEA's staircase model. One reason for this is probably that ISO 14001 is a third party certificate (IWAY 2002). Welspun is in the process of getting a lab accreditation at their factory lab (but an environmental label must be verified at a third part laboratory). Welspun has testing facilities to test all requisite quality parameters of a towel and to test dyes, chemicals and auxiliaries. This gives them great possibilities to acquire knowledge about all their different products and production methods and test if they can make any changes to improve pollution prevention.

## 5.3 Introduction of Stakeholders

So far I have introduced IKEA as a stakeholder. Also other stakeholders could influence Welspun and Continental. I will now give an overview over relevant stakeholders to my cases, without questioning their respective power and interest to influence environmental decision of Welspun and Continental. This topic will be part of the analyses.

**Owner/Shareholders:** The relentless pursuit of profitability in order to provide dividends has been widely cited as a crucial factor in causing firms to play fast and loose with business ethics (Crane & Matten 2004:183). Welspun is listed on the stock exchange, while Continental is owned by two brothers who are also managing the company.

**Employees:** Employees are perhaps the most important production factor or "resource" of the corporation; they represent the company towards most other

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<sup>7</sup> It is difficult to get knowledge about the number of textile companies certified under ISO 14001 in India. In 2002 it was supposed to be 20 (Textile Committee 2002:62), but on the webpage of Textile Committee in September 2005 the number of companies opted for a ISO 14000 EMS were supposed to be 13. When I asked at the office of Textile Committee in Delhi to see a list over companies with ISO 14001, they could only give me 10 names and Welspun and Continental where not included, so I am not sure how good overview they have. (It could be that they only know about the companies they have themselves certified).

stakeholders, and act in the name of the corporation towards them. Employees are clearly affected by the success or otherwise of their company (Crane & Matten 2004:224-5). I have mainly talked with managers at both companies, and have therefore little knowledge about other employees.

**Customers:** Customers are one of the most important stakeholders for any organization, since without the support of customers of any sort, such as through the demand for or purchase of good and services, most organizations would be unlikely to survive for very long. The end-consumers have no contact with the producers, since Welspun and Continental supply other brands. It can therefore be argued that IKEA and other buyers are the customers of Welspun and Continental

**Suppliers** (resources, half-fabricates and technology): Suppliers can benefit from the success of the corporation by receiving orders for products and services and they can be harmed by loosing orders (Crane & Matten 2004:305). One of the most important supplies for Welspun is cotton. Continental is supplied with yarn. Chemicals and machines are also supplied from other companies.

**Competitors:** (Local and foreign) Competitors can experience a loss or a gain of market share as a result of the actions of their rivals, they can experience a change in trading conditions (for example, higher standards or eco-labels), or they can face changes in the perception of their industry by customers, regulators, or other stakeholders as a result of the behaviour of their competitors (Crane & Matten 2004:306). Welspun's main competitors are Trident and Sharda Terry in India and Chinese producers. The manager at Continental did not worry too much about competition, but acknowledge that the Chinese companies can be a threat. Trade organizations are also part of the competitive context. Welspun participates in an Environmental cell "Green Business", where they can discuss new eco-friendly technology (Mr. Sarovar)

**Civil Society:** Civil society is made concrete and meaningful for corporations through specific Non Governmental Organisations (NGOs). The stake held by NGOs is largely one of representing the interest of individual stakeholders. Corporations tend not to deal with civil society as a group of innumerable individual citizens, but as a more discrete collection of representative NGO.



**Government** (regulation): Business ethics tends to begin where the law ends. This would suggest that government takes a role of setting the baselines of acceptable practise in business. It is usually regulations, rather than the law specifically, that tend to operate in the grey areas of business ethics (Crane & Matten 2004:388-9). The Government policy can provide incentives for the industry to be more environmentally friendly. The government is represented by several different actors. The Ministries set the legal framework and policies influencing the textile producers. Two actors that are more directly in contact with textile producers and whom I have focused on in this thesis are the Central Pollution Control Board and the Textile Committee. The Textile Committee is a statutory body constituted under the Textiles Committee Act, 1963. They support the industry by giving seminars on eco-friendly production and can accredit ISO 14001. The Central Pollution Control Board (CPCB) has the executive responsibility to stop industrial pollution and the monitoring of compliance is done by different State Pollution Control Boards.

## **6. A Review of Factors Influencing Corporate Environmental Improvements**

Different companies face distinct set of pressure, opportunities and other stimuli which may be influencing their behaviour in different ways. I want to look at pressures that lead to higher levels of environmental performance. Before I start the analysis I will based on literature present a review of different explanations given on determinant factors of corporate environmental improvements. Different surveys from around the world have identified the relative importance of the different factors, and I will refer to some of their conclusions. In the analysis I will consider if any of the explanations in this chapter are relevant for understanding my case studies. I will start with reviewing five external factors and then review eight internal factors. It should be noted that some of the external and internal factors are closely related, like for instance nr 4 (customers) and nr 8 (position in the value chain). Even if different explanations are related to each other, I have found it useful to divide between external and internal factors, to get a broader picture of how they are related.

### **6.1 Geographical Location**

Geographical location of production seems to be an important factor insofar as it relates to environmental regulations and social pressure (Gonzales-Benito & Gonzales-Benito 2006:95). The degree to which the business of a company is tied to a specific locale, people, or production process determines how important this factor is: “A company that cannot pick up and move must learn to manage risk of transnational activism and government regulation” (Haufler 2001:25).

Exogenous risk is lower when production activities are located far away from large cities and natural reserves or within industrial estates or when plants represent an important source of employment for nearby towns (Gonzales-Benito and Gonzales-Benito 2006:95).

The opposite is the case of firms operating in regions of relatively high socio-economic status or in environmentally ‘sensitive’ areas. They are likely to have a relatively high risk of private litigation (Stoeckl 2004:152), which could lead them to

be more environmentally proactive. “The most regulated regions concentrate the most proactive companies” (Gonzales-Benito & Gonzales-Benito 2006:95). This can be either because only companies that are environmentally friendly want to have production in areas with the most regulation, or because companies in areas with the most regulation become environmentally friendly.

Community concern and local pressure is influenced by geographical location of a company. Local communities can impose coercive pressure on companies in many different ways. Delmas and Toffel argue that local pressure can be imposed “through their vote in local and national elections, via environmental activism within environmental non-government organizations (NGOs) and by filing citizen lawsuits” (2004:213). Delmas and Toffel refer to different studies that have found that adoption of environmental management practice “was more likely in communities with higher median household income” (2004:214) and that “greater declines in toxic emissions have been observed among plants located in communities with higher voting rates and in states with higher membership in environmental interest groups” (2004:214). The household income, knowledge about and interest of environmental topics can influence the relative power of local communities in relation to companies.

Hansen mentions general public pressure as an important factor for improving corporate environmentalism (2002:195-7). A survey among 200 South African companies found that the main drivers of corporate environmental responsibility were ‘public opinion’ (64 %) (Hansen 2002:202). The reasons stated by firms in Central America for adopting or changing existing environmental plans indicated that ‘Community concerns’ scored high (Pratt & Fintel 2002:44). Most of the companies’ commitments on environmental protection in the Brazilian pulp industry constitute to some extent, an answer to local pressures (Carrere 2002:93).

In the analysis I will see how geographical location may have influenced environmental improvements at Welspun and Continental.

## 6.2 Government Regulation

The most cited explanation for companies to improve their environmental policy and practice, is government regulation or the risk of regulation (Haufler 2001:3; Utting 2000; Pratt & Fintel 2002:44; Hansen 2002:177). Research in advanced industrial context shows that corporate environmentalism is primarily motivated by regulatory and public pressure rather than opportunities for financial savings, competitive advantage or green premiums (Murphy & Bendell 2002:246; Utting 2000:22)

The northern context might not be relevant for explaining environmental practice in India, but also examples from Southern countries suggest that government regulations is important in improving environmental standards. Perry and Singh give an example on how Singapore and Malaysia responded to deteriorating environmental conditions in the 1970s primarily through command and control regulation. They claim that in Singapore and Malaysia, the tightening of standards and extension of regulatory controls has been the most important response to new concerns and gaps in original environmental controls (2002:103-4). A survey among 200 South African companies found that 83 % of the respondents considered 'government policy/legislation' as one of the main drivers of corporate environmental responsibility (Hansen 2002:202).

Haufler states that "most business leaders also constantly assess the likelihood of government regulation as one of the major political risks they face" (2001:21). One important reason for business leaders to fear regulation is that regulation can cost industry large amounts, or in the worst case drive them out of business. The risk of government regulation increases the fear of incurring the cost of environmental damage. The costs have risen dramatically in many countries as regulations have tightened and also become increasingly unpredictable (Cairncross 1995:179). This gives companies a reason to adopt and design voluntary initiatives; to assure that there is no need for government to intervene. Haufler claims that voluntary initiatives are a defensive mechanism to prevent regulation (2001:22). Cairncross argues that corporate environmentalism should be driven by regulation, because companies are not individuals, with a moral obligation to be good environmental citizen. He states that:

It is the job of government to set the regulatory framework in which companies operate; it is the job of companies to obey the law. To rely on companies to set their own environmental standards is not merely naïve; worse, it is unfair to companies that genuinely want to pursue sound environmental policies. Left to regulate themselves, the most responsible companies may well follow such policies. But not all their competitors will copy it (Cairncross 1995:188).

It seems that most researchers agree on the importance of government regulation. In addition to looking at how the environmental regulation in India is influencing Welspun and Continental, I will in the analysis also look at other government policies that support (or discourages) environmental improvements in the textile industry.

### 6.3 Transnational Activist Pressure

The 1990s saw a considerable increase in transnational activism around issues of corporate responsibility. According to Jenkins “this was partly a response to the perception that governments were not effective controlling the activities of large corporations, following the deregulation of the 1980s” (2001:10). Murphy and Bendell believe that there is strong case for the emergence of civil regulation, since according to them; there is a global race to the bottom of environmental and social regulation (2002:254). They state that “Corporations are increasingly being compelled to take action by civil society, not by government” (Murphy & Bendell 2002:245).

Other researches also emphasize the role of pressure groups such as Non Governmental Organisation (NGOs), but without undervaluing the role of government regulation (Haufler 2001:3; Hansen 2002:177; Utting 2000). Haufler argues that “In many cases, such as an oil spill or the exposure of sweatshop conditions in a factory triggers the mobilization of pressure groups and leads to the development of new industry principles” (2001:9). She gives the example off Shell who lost a substantial amount of business when it tried to dispose of an old oil platform in the North Sea. Greenpeace launched an extensive and successful European campaign against it, using both media exposure and boycotts (Haufler 2001:23). The Bhopal disaster in 1984 and the Exxon Valdez oil spill in 1989 (Zadek

2004:2) is also often referred to as incidents that made the public aware of the failures of existing regulatory instrument, and therefore lead to substantial transnational activist pressure. This pressure resulted in changes in company's environmental policy. Cairncross claims that company's change their behaviour as a defence against media-friendly pressure (1995:179). Jenkins argues that "in a number of instances, NGO activism, by threatening a company's reputation, has forced those who are targeted to respond in some way" (2001:11).

Given increasing concern with and ability to affect market behaviour, NGOs have developed a number of tools to change corporate policy: corporate boycott, direct action protest and collaboration. Utting argues that confrontational activism remains a key driver of voluntary initiatives, despite the tendency to argue that stakeholder dialogue and partnerships are the key to advancing the CSR agenda (Utting 2005b:10). Companies have accepted that NGOs are part of the business landscape, and they would do best in learning from them, and thereby also hopefully getting them onside (Zadek 2004:77). "In addition to help with getting the job done, significant public relations benefits may be gained from collaborating with NGOs" (Murphy & Bendell 2002:220). Many voluntary standard-setting efforts are today developed cooperatively by groups of industry and NGO representatives. Utting (2005a:381) and Abrahams (2004:3) see two different trends concerning civil regulation: The first trend involves a degree of convergence of business and civil society approaches to development and regulation, and the strengthening of multi-stakeholder initiatives and partnerships. The second trend involves new forms of civil society activism centred on "corporate accountability<sup>8</sup>" and increasing calls for stronger regulation based on international law.

Gaarder questions how effective transnational activism can be. She argues that working conditions in Norway would probably not have improved due to occasional exposure in foreign media instead of an organised Labour Movement and governmental regulation (2004:4). How effective can such initiatives be to improve

environmental conditions in developing countries? According to Utting “civil society groups and movements are often limited in their capacity to exert pressure, particularly on a sustained basis” (2000:28). Murphy and Bendell gives an example of a NGO project with substantial financial and in-kind commitments and questions the capacity of NGOs to respond to demands for similar partnerships in other industrial sectors around the world. They raise concerns about both the sustainability and replicability of elaborate and ambitious monitoring and verification schemes (2002:236). Another problem with transnational activist pressure is that different NGOs have very different agendas and the “topic of the moment” can change fast and therefore have little or no long-term effect. In developing countries it is also a challenge that international NGOs may not have the same view and priority on environmental problems as local NGOs and local communities: Focusing on environmental issues, NGOs may for instance ignore “issues associated with the protection of livelihoods, labour standards and human rights, which are likely to be of more immediate concern to workers, woman and farmers in developing countries” (Utting 2000:38). It is also questionable how many of the world’s producers who are actually affected by transnational activist pressure. NGOs do not have the capacity to pressure all the producers, and have to priority which ones they will target. NGOs are definitely playing a role in encouraging environmentally friendly production, but there is a need for more research on the effect of NGO pressure to say how powerful they actually are.

Not all companies face the same risk of being pressured by NGOs. Large firms, multinational companies, market leaders and “dirty firms” face a relatively high risk of getting the attention from NGOs and have more to gain by developing sophisticated mechanisms to anticipate external pressure (Stoeckl 2004:152; Delmas & Toffel 2004:215). Multinational corporations are subject to additional pressure of stakeholders from foreign countries, market leaders are more visible and therefore

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<sup>8</sup> Corporate accountability suggests that TNCs “have to answer to their stakeholders and be held to account through some element of punishment or sanction” (Utting 2005a:385).

often subject to more pressure and firms with historically poor environmental records are often subjected to more scrutiny by their local communities and regulators.

In the analysis I will see if Welspun and Continental have faced any civil regulation, and how they might have been influenced by NGOs to focus more on environmental issues.

## 6.4 Customers' Tastes

Cairncross argues that consumer tastes have changed and shoppers suddenly became more interested in the environmental pedigree of the products they bought (1995:179), but he doesn't believe that pressure from consumers would be sufficiently universal or coherent to ensure that dirty firms are driven out of business, and environmentally responsible ones prosper (1995:188). Stoeckl argues that only firms selling eco-friendly products to relatively affluent consumers are likely to see relatively large demand-side effect (2004:152). Murphy and Bendell argue that consumer politics brings greater financial risks than government fines for pollution;

Although governments may have the purported monopoly on force – and therefore the 'final say' – in reality the ability of civil society organization to regulate business behaviour through financial carrots and stick is rapidly more powerful (Murphy & Bendell 2002:253).

Consumers have in no doubt power to influence how environmentally friendly production is by choosing to buy only products that are eco-friendly. It seems like consumer pressure is relative low compared to what it could have been. Jenkins claims that “consumer pressure is usually *political* pressure from civil society, orchestrated by NGOs, which uses the threat of consumer action to achieve this end” (2001:15).

Most of the companies' commitments on environmental protection in the Brazilian pulp industry “constitutes an answer to customer concerns” (Carrere 2002:93). A survey among 200 South African companies found that the main drivers of corporate environmental responsibility were 'customer demands' (62 %) (Hansen 2002:202). The reasons stated by firms in Central America for adopting or changing existing environmental plans indicated that customer demand did not score high (Pratt &



Fintel 2002:44). Customer concern could in these cases mean concern about buying companies, not necessarily consumers of the products they make. In the analysis I will focus on how buyers might have influenced my case studies, since IKEA and other buyers are Welspun and Continental's direct customers.

## 6.5 Industry Collaboration on Standard Setting

Haufler states that "consensus within the industry" can be an important factor for companies to be environmentally proactive (2001:3) and Hansen argues that peer pressure could influence a company (2002:195-7). Stoeckl argues that firms that are member of industry-wide association may be able to collectively design environmental programmes that forestall regulations imposed by the government (2004:152). Delmas and Toffel argue that "organizations are more likely to mimic the behaviour of other organizations that are tied to them through networks" (2004:214). 'Best practices' established by business leaders or industry associations may influence how managers view available options (Haufler 2001:28). Haufler also argues that "when corporations can agree on setting standards together the competitive position of each is maintaining" (2001:24). Since the textile industry is not in a market with few companies, it is difficult to get all the different firms to agree. When companies that are relatively dominant in their respective markets have adopted environmental practices, they have sought to avoid it being a cost-disadvantage by pressuring "follower" competitors to imitate their approaches (Zadek 2004:33).

In the analysis I will discuss if there is any consensus about environmental standards in the Indian textile industry and look at how other companies might have influenced environmental improvements at Welspun and Continental.

## 6.6 Reputation

Reputation is the first of the internal factors. This factor has become increasingly important in the past 15 years, because various pressures have led to a shift in thinking on the part of companies. Business leaders have started to recognise how a

company's reputation affects its bottom line (Dashwood 2004:189). According to Cairncross companies has begun to see the value in a reputation for good environmental citizenship, and do improvements in desire for good publicity (1995:179). Several researchers claim that intangible assets such as brand names have increased dramatically in value (Utting 2005b:20; Zadek 2004:28; Jenkins 2001:7; Haufler 2001:3). When a company does not carry out its own manufacturing process, and spends heavily on advertising and promotion in order to establish a corporate image, is highly vulnerable to anything that would tarnish that image (Jenkins 2001:7). Utting argues that "CSR is a crucial weapon to defend such brands against risks and to enhance brand value through improved company and product reputation and image" (2005b:20). Once reputation becomes a significant asset of a company, that company will be more vulnerable to activist campaigns (Klein 2001; Haufler 2001:109). "The more a company values its reputation, the more likely it will be to try to preserve it and promote it through a variety of corporate codes and other voluntary initiatives" (Haufler 2001:27). The adoption of ethical principles can give the company a good reputation among company staff and increase their commitment to the company. A good reputation may increase the ability of a company to make deals with other businesses more easily, because "potential partners will want to be associated with the reputable firm or may simply trust it more." (Haufler 2002:26). A company's reputation also influences its relationship with government. The reasons stated by firms in Central America for adopting or changing existing environmental plans indicated that the strongest motivators were image and reputation of the company (in addition to government regulation) (Pratt & Fintel 2002:44).

In the analysis I will look at how important reputation is to Welspun and Continental, and in what way this could have influenced the environmental improvements at the factories.

## 6.7 "Win-Win" Opportunities

"The most obvious reason why companies choose to adopt and be responsive to particular indicators is that there is a demonstrable linkage to financial performance"

(Zadek 2004:170). Hanks argues in accordance with the social theory of 'ecological modernization' that there is great merit in focusing initial environmental policy endeavour on issues such as 'cleaner production' or 'eco-efficiency', and on the promotion of 'no regrets' options and 'win-win' opportunities (2002:190). Porter and van der Linde argued that it is possible to be 'green and competitive' (1995) and Utting also mentions 'win-win' opportunities (2000).

If it is possible to gain more profit on being environmentally friendly, it would be a bad business decision not to use that opportunity. Yet, many companies do not choose to be environmentally friendly, so it seems that either businessmen are stupid, not seeing business opportunities, or the linkage between eco-friendly production and profit is not obvious. Business is generally thought to be profit-maximising and this gives them an incentive to externalize costs. Many of these costs can be externalized simply by a shift of location (Welford 2002:139) or by using suppliers in developing countries. It can be argued that it will always be in the financial interests of companies to externalize costs until we establish laws that prevent this. David Korten argues that 'real ethics' costs real money, that is, there is a trade-off between profits and principles (Korten referred to in Zadek 2004:54).

Even if there is no immediate link between environmentally friendly production and profit, there is still a link in some cases. And these cases can be important explanations to why some producers choose to more eco-friendly. Stoeckl hypothesize that "firms that are likely to accrue positive net benefits from environmental programmes are more likely to participate in self-regulatory schemes than firms that accrue net costs" (2004:136). According to Stoeckl, the firms which have most to gain on environmental improvements are large firms, 'dirty firms' and firms that are capable of differentiating products on environmental grounds. Large firms are likely to have relatively small up-front abatement costs, relatively large productivity benefits, relatively low discount rates, relatively large demand-side effects and a relatively high risk of private litigation while 'dirty firms' also are likely to have relatively small marginal abatement costs, and a relatively high risk of private litigation. Producers with 'green' products are likely to see relatively large demand-side effect (2004:152).

There are two different opportunities to gain profit through environmental improvements: cost savings in production or the costs could be offset by significant benefits in terms of new markets (Haufler 2001:24). Companies can save money by using less energy, water, raw materials and chemicals or by reducing their waste: “Demonstrating to senior management how much money and toxicity is leaving their premises in the form of unmonitored waste is likely to serve as a strong motivation to reduce these losses” (Hansen 2002:204). Savings on waste reductions are dependent on the costs of waste disposal. It is also possible that by making environmental improvements, the production will at the same time be more productive. The desire for productivity gains scored high among reasons stated by firms in Central America for adopting or changing existing environmental plans (Pratt & Fintel 2002:44). Opportunities to earn money on environmental improvements is a good argument to gain business’ attention, but one problem with this argument is not only that the argument is only true in some cases, but that linking environment with profit could take away attention from business environmental responsibility. Perry and Singh states that “there are reasons to believe that interest in voluntary action will decline as companies fail to obtain the extent of economic or public relations benefit that they may have been expected” (2002:126).

In the analysis I will look at how two different ‘win-win’ opportunities, cost savings and market benefits, may have influenced the decisions at Welspun and Continental. I will also see if there has been any external factors influencing the opportunities to become more eco-friendly.

## 6.8 Position in the Value Chain

The proximity to the final consumer within the supply chain can be intuited as an important factor influencing the environmental proactivity of a company. This is fundamentally due to the fact that consumer pressure is high for the manufacturers of finished products and loses strength the higher the manufacturer’s position in the supply chain (Gonzales-Benito & Gonzales-Benito 2006:93).

This argument builds on the claim that consumers pressure companies, which I discussed in the paragraph on customers. If the argument is true, it follows that producers out of the view of consumers are not likely to be pressured. The position

in the value chain could also influence how much pressure a producers gets from the head quarter. Pressure to conform to environmental criteria set by the corporate head office is most frequently given as the most important driver of voluntary action in Malaysia and Singapore (Perry & Singh 2002:117). In Malaysia and Singapore there is a good correlation between organizations that supply final goods and those citing enhanced reputation with customer as the key advantage (Perry & Singh 2002:121).

In the analysis I will look at how Welspun and Continental's proximity to the final customer is related to environmental consumer pressure.

## 6.9 Internationalisation

Market driven upgrading takes place partly as Northern companies – Transnational corporations (TNC) – establish subsidiaries in the developing world and deploy advanced environmental practices and technology, and partly as standards and practices are disseminated along the value chain to suppliers, distributors and customers in developing countries (Jeppesen & Hansen 2004:262).

Utting agrees that networks controlled by TNCs may act as conduits for the diffusion of cleaner technologies and improved environmental management systems (2002:275). Pratt and Fintel attribute the higher level of performance among international firms to parent company policies, customer and shareholder expectations and company image. They argue that TNCs also contribute knowledge and experience in environmental management learned in their more demanding markets (2002:55). Multinational companies tend to define their environmental policies so that they meet the most stringent requirements prevailing in the relevant countries where they compete. Gonzales-Benito & Gonzales-Benito state that “there are important differences between companies operating in developing countries that sell their output to local customers and those that sell to other multinationals or export most of their output” (2006:92). This leads to the conclusion that it matters more where a product is being sold, than where it is produced.

A survey among 200 South African companies found that ‘international trade’ where one of the main drivers of corporate environmental responsibility (51 % of respondents viewed it as a driver) (Hansen 2002:202). Another survey, conducted in

early 1996 by the Lexington Environmental Group in Mexico, found that environmental performance was more closely associated with some form of participation in the international arena, than it was with size, profitability or other attributes (Pratt & Fintel 2002:45). The data from a survey in Costa Rica indicates a strong relationship between being an exporter and the existence of environmental management programmes (Pratt & Fintel 2002:47). Jeppesen and Hansen claim that “the presence of foreign firms in South Africa is among the factors that have led to an increasing number of local firms becoming ISO 14001 accredited” (Jeppesen & Hansen 2004:264).

The importance of producing for a TNC may be exaggerated; TNCs may not always encourage a supplier to be more eco-friendly. Even if a TNC has a ‘codes of conduct’ the foreign buyer could in many cases collaborate better with their suppliers to make them comply with environmental standards. Foreign firms can promote upgrading of local firms’ environmental performance in many ways. Three commonly employed are standard setting, monitoring and control, and technical collaboration. Even if there are several opportunities to collaborate with foreign suppliers, Jeppesen and Hansen have the impression “that environmental collaboration along the value chain is rule and control based, and only rarely do foreign firms offer resources and expertise to Third World collaborators” (2004:265). Perry and Singh argue that a commitment to higher standards, by standardizing the environmental performance of their affiliates in different foreign locations, is a possible source of cost savings by reducing the variability in management procedures and technology (2002:126). In other words, a higher standard does not necessarily implicate an environmental strategy. Jeppesen and Hansen examine under which conditions linkages to foreign firms lead to environmental upgrading of Third World enterprises. They argue that “environmental upgrading in the value chain must be understood partly as a result of external industry and market forces, and partly as a result of the internal resources and competitive strategies of the companies involved” (2004:261).

In the analysis I will look at how important internationalisation has been for Continental and Welspun, and in what way it may have influenced environmental improvements.

## 6.10 Strategic Attitude

Strategic attitude is the way in which the company reacts or proacts to market stimuli and is given as one explanation for corporate environmental activity (Gonzales-Benito & Gonzales-Benito 2006; Utting 2000; Stoeckl 2004; and Cairncross 1995). Utting argues that some companies are attempting to maintain or gain competitive advantage through product or company features associated with environmental and social responsibility (2002:285). Stoeckl also argues that firms that are capable of differentiating products on environmental grounds are likely to see relatively large demand-side effects (2004:152). Some companies even shift their business as a whole in a significant new and more environmentally friendly direction. Cairncross gives the example of Shell shifting away from non-renewable to renewable resources (1995:179).

Certification can be an important part of a strategic attitude, as management choose which certificates they want to have on their products, and if they want to include certification demands in their supplier selection. Certifications are promoted by large retailer in the North to meet consumers concerns associated with environmental issues (Utting 2002:285). In the analysis I will look at Welspun and Continental's environmental strategy.

## 6.11 Company Size

Company size is according to Gonzales-Benito and Gonzales-Benito one of the variables that most seems to influence the implementation for environmental practices. Large companies have more resource availability to devote to environmental management; they receive more pressure from their social and economic environment and are frequently the primary objective of local governments and environmental non-governmental organization (2006:91-2), and hence have a relatively high risk of private litigation (Stoeckl 2004:152). Pratt and Fintel argue that small and medium-sized companies in Central America lack the knowledge and financial liquidity to realize potential gains from reduction of energy consumption

and waste. They also state that the business planning horizon is extremely short, given the high risk of operations (2002:54).

Large firms are likely to have relatively small up-front abatement costs, relatively large productivity benefits, relatively low discount rates and the environmental efforts of large companies have a positive impact on a large number of customers so the demand-side effects are relatively larger than for small companies (Stoeckl 2004:152). Perry and Singh claim that larger organizations have taken most action to increase their environmental responsibility (2002:126). According to Barkin are the larger corporations, especially subsidiaries of international firms, the companies most able to qualify to be labelled as 'clean industry' by the government. These companies have the easiest access to capital markets, technology and know-how, as well as the institutional capacity to undertake the training and investments required for incorporating these innovations in an increasingly competitive market (2002:22).

Not everyone agrees that the bigger size the better. Carrere has done research in the Brazilian pulp industry and concludes that the large-scale investments there are incompatible with both environmental protection and social equity. He argues that it seems necessary to downgrade the size of the pulp mills and to diversify raw materials used in pulp production, adapting the mills to a variety of resources available at the local level (2002:94-5). Also Utting is critical of large companies, he claim that it is unlikely that large companies realize environmental goals "when the inherently large scale of their operations means large-scale environmental impacts are inevitable" (2002:274). In the analysis I will look at how the different sizes of Welspun and Continental have influenced their environmental improvements.

## 6.12 Employees' Environmental Awareness

Staff morale and knowledge about environmental issues can influence the decisions of management. Carincross states that in many companies, the pressure to adopt sound environmental policies came initially from the workforce (1995:179). Perry and Singh found that increased workforce environmental awareness is the second-ranking main influence of voluntary action in Malaysia and Singapore (2002:117). In



the analysis I will look at how employees may have influenced environmental improvements at Welspun and Continental.

## 6.13 Managements' Environmental Awareness

The importance of management as a determining factor for corporate environmental improvements is stressed by many (Cairncross 1995; Gonzales-Benito & Gonzales-Benito 2006; Prakash 2001; Dashwood 2004 and Delmas & Toffel 2004). Cairncross mentions how the morale of managers can influence business decisions. He argues that “managers, especially those of the post- Stockholm generation, often want to have an environmental record to be proud of; some feel it improves the quality of management too” (1995:179). Dashwood argues that some companies (or the managers in those companies) see environmental activity as in their interest: “from some types of business, the roles and identities they have crafted for themselves have led them to view corporate responsibility as consistent with their objectives” (Dashwood 2004:190). This could explain why some companies have a more environmentally friendly strategic attitude. Gonzales-Benito and Gonzales-Benito argues that attitude and motivation of management constitute an important variable for explaining the environmental activity of a company (2006:94). To get the required resources to implement environmental strategies, the support of top management is essential. In addition “many environmental initiatives require the collaboration and coordination of different department and division and this is easier to manage when such initiatives are endorsed from the top” (Gonzales-Benito & Gonzales-Benito 2006:93). Unless a manager is able to make all the decisions concerning the environment on his own, it could make more sense to look at the prevailing motivation within a company rather than the specific motivation of a particular manager.

Prakash focus on the roles of key managers, the policy-supporters, who champion beyond-compliance policies (2001). He argues that discursive struggles take place among three categories of managers: policy-supporters, policy-neutrals, and policy-sceptics and that a power-based or leadership-based process can ensure that environmental management policies are adopted (2001:287). The final outcome of

the discursive struggle depends on factors such as “policy-supporters’ hierarchical position, their persuasive or canvassing abilities, their expertise in the issue area, and how they invoke external factors to shape perception of others” (2001:287). Prakash does not view managers as passive recipients of external pressures. He argues that it is important to examine how managers interpret external pressures to advocate their agenda: “In the context of beyond-compliance policies, managers have autonomy to interpret the impact of external pressures on the long-term profit and non-profit objectives” (2001:289). Delmas and Toffel argue that the way in which managers perceive and act upon pressure from different stakeholder at the plant level depends upon plant- and parent-company-specific factors. They hypothesize that “organizational structure, strategic positioning and performance will affect firms perceive institutional pressures and how they decide to respond” (2004:212). The organizational process transforms objective pressures into perceived pressures (Delmas & Toffel 2004:210). The decision to have a more proactive environmental strategy could be dependent on the managers’ interpretation of environmental issues as opportunities instead of threats.

The trend with less state intervention has led to a belief in ‘soft law’ (self-regulation) instead of ‘hard law’ (government regulation). Self-regulation may not always be what it appears to be. There are some examples where a more proactive approach happened under external pressure. Preuss gives an example of a collaboration of a manufacturer of test equipment for the electronic industry and its medium-sized sheet-metal supplier to eliminate hazardous heavy metals from the supplier production process, due to an EU directive to remove certain heavy metals from electronic products. He concludes that regulatory pressures seem to emerge as a “necessary ingredient for greener supply” (2005:137). Haufler agrees that effective self-regulation is unlikely without some countervailing power; TNCs are held in check by international mobilization and by government intervention. (2001:113). Utting is also sceptical of the increased reliance on voluntary initiatives: “Such initiatives are often presented as effective alternatives to state regulation, when in

fact their success in many industrialized countries has often involved an important regulatory component” (2000:31). Perry and Singh agree that voluntary corporate environmental action cannot be seen as an effective substitute for government regulation. They argue that since only a minority of companies<sup>9</sup> have self-regulation, “government-enforced upgrading of performance standards is important to reward those firms that invest ahead of regulatory requirements” (2002:128). Hansen claims that “self-regulation cannot be employed to secure basic environmental minimum standards” (2002:177). Dashwood acknowledges that “although voluntary initiatives are no substitute for government regulation, they can complement or reinforce hard law” (2004:189).

Various stakeholders have different opinions on which responsibilities a company have and how the company should prove to be responsible. Zadek tries to give an answer on what we can expect that business could do: “Judging and ultimately guiding corporate performance requires an examination of whether a business is *doing what it can do* given its range of external options and internal competencies” (2004:9). In the analysis I will look at how self-regulation is related to managers’ attitude, motivation and knowledge.

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<sup>9</sup> They involve a small fraction of the world’s 61,000 TNCs, nearly one million affiliates and several million suppliers. By December 2004 approximately 90,000 facilities was involved in ISO 140001, the world’s largest CSR-related certification scheme (Utting 2005b:4). But it should be noticed that of the companies involved, many are among the World’s largest.

## 7. Analysis

Based on explanations from the previous chapter, I will analyse the empirical evidence from the case studies of Welspun and Continental. I will start with the five external factors and then see how these are related with the next eight internal factors. I have found this structure useful to see how internal and external factors are related and to argue whether external or internal factors can best explain the cases of Welspun and Continental. All thirteen factors could have been studied on its own in a thesis, but I have tried to focus on a broader picture to see how they all relate, and if some factors are more important than others. In the end of the analysis I will give a short summary and see how internal and external factors are related to structure and agency.

### 7.1 Location in Industrial Areas

Both Welspun and Continental are located in industrial areas outside Mumbai and Delhi, which according to Gonzales-Benito and Gonzales-Benito should lower the exogenous risk for social pressure and environmental regulation (2006). Polluting industry has since 1996 been relocated from the proximity of Indian cities, into industrial areas, but people still usually live in or around these areas. I will argue that people living close to factories are likely to work in one of them, and therefore have less incentive to complain about pollution from them. I have no information on any complaints about Welspun or Continental from local communities. If I look at the description of Delmas and Toffel in chapter six on where community pressure is most likely I would need more knowledge about household income, voting rates and membership in environmental interest groups to make any conclusions on how important local communities are in my case studies. But I find it unlikely that Indians with a high household income would chose to live in an industrial area, and membership in environmental interest groups seems to be higher in the middle class, and in the big cities. I therefore consider the risk of community pressure to have been quite low in the industrial areas where Welspun and Continental are located. Continental first factory was situated in a small, congested area (Mr. Garg). They

moved to a new factory in 1999. I do not know if the relocation had anything to do with community concern. The need for more space to expand could be another explanation. If a factory is close to big farm areas, the pressure from local farmers might be greater, since pollution could affect their farm land. But this pressure would probably depend on how much power the farmers have. There were no farms close to the factories of Welspun and Continental.

The geographical location decides what kind of environmental regulation the company has to comply with. India is divided into states and the states have a variation of laws, depending on the geographical differences. If the factories had been located in Tamil Nadu where there are acute water shortages, they would have to recycle more water used during production (Mr. Saha). This is not necessary in the areas where Welspun and Continental are located, and could explain why they have not been focusing on water recycling.

## 7.2 Government of India: Regulations and Policies Supporting an Eco-Friendly Industry?

As noted in chapter 6 government's regulation was the most cited explanation for companies to improve their environmental policy and practice. Even if government regulation has been one of the main factors inducing firms in Northern countries to respond to environmental and social issues, government regulation may not have the same importance in India. The lack of resources in developing countries to control regulations and enforce laws (Pratt & Fintel 2002:51), makes it difficult (maybe impossible) to use government regulation in the same way as in many Northern countries. According to Cairncross it is not only a problem that the environmental department is not effective due to lack of resources, the lack of power to make decision is also a great problem: "the government decisions that have most effect on the environment – decisions about agricultural subsidies, road-building and industrial development – are taken by other, more powerful ministries" (1995:44). The government is providing an external pressure on the industry, not only by its environmental regulation, but also by other parts of its policy. I will therefore

consider if the policy of Government of India is supporting the industry to become more eco-friendly, by looking at the examples of Welspun and Continental.

### **7.2.1 Government Regulation in India**

As I wrote in chapter 4 the regulatory framework governing the environmental compliance of textile manufacturing has been in place the last 20 to 30 years, but the regulatory mechanism has so far failed to control most of the industrial pollution. I asked a manager at a factory when environment became an issue for the textile industry. He said that after 1985 there was an expansion and a lot of investment in the textile industry. The government became aware that some industrial areas were heavily polluted and wanted to relocate them from inhabited areas. The industry has still not moved, because they did not get any compensation for moving or subsidised land. Instead they installed Effluent Treatment Plants (ETPs). After they had installed ETPs the government thought that everything was ok and did not check if the ETP was used properly. He says that laws and regulations are not strict enough (anon<sup>10</sup>). According to Mr. Saha “7 years back, there was hardly any awareness [of environmental regulations] at all”. Mr. Saha who works for IKEA and the manager at Welspun, claim that there have been some improvements the last 6-10 years, but Mr. Saha argues that there should be a bigger penalty for breaking the law. Dyson et al. find the environmental policy reform in India unsatisfactory. They claim that “politicians and civil servants are frequently not gripped with the importance of environmental objectives and the damage caused by environmental pollution” (Dyson et al. 2004:364). The Textile Committee admits that the enforcement of regulation “has not been effective due to lack of clarity over the responsibility amongst the government organisations for its enforcement” (Textile Committee 2002:63). According to the manager at Welspun the environmental regulation is sufficient for the moment. The small factories are struggling, but he thinks they will be gradually better, because the enforcement is better (Mr. Sarovar). His opinion could indicate that enforcement of environmental regulation has been a factor behind

Welspun being environmentally friendly, since he acknowledges that better enforcement leads to environmental improvements. I don't know of any threats of fines or withdrawing of concession, due to failure of reaching environmental standards at any of my case studies. I did not have any problem to get information about their effluent treatment plants or pollution values, which indicates that they have nothing to hide. But the regulation may anyhow have influenced the standards at the factories, since the pollution levels are close to the governmental requirement. Another influence could be that the demand and control regime of Pollution Control Board results in end-of pipe- solutions instead of pollution prevention. Ruud argues that the Government in India should introduce more market-based regulations to encourage the introduction of cleaner technology (2000:259-60).

### **7.2.2 Environmental Regulations in Buyers' Country**

There is also another possibility of regulations to influence the factories, namely the regulation in EU. Since IKEA has its main market in the EU, their codes of conduct reflect that they want the production of their products to be equal with the EU standard (Frithiof 2005). How important this influence might be, I will continue to discuss in the section 7.4 on 'Customers'. Mr. Saha (IKEA) claims that environmental demands mostly come from European buyers, like the ban on azo-dyes and formaldehyde. He says that the government is now strict and everybody is demanding azo-free textile.

Germany's ban on azo-dyes is a good example of how foreign regulations can have an impact on the Indian textile industry. The government and industry leaders focused on phasing out the banned dyes, to prevent their textiles from not being imported to Germany. There seemed to have been some fear that this ban could be the beginning of many more bans from industrialised countries and the Indian industry should keep up with foreign regulations to avoid environmental requirements being used as a new trade barrier (Textile Committee 2002). The

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<sup>10</sup> Anon. is a reference to an anonymous informant

Textiles Committee conducted a study to assess the presence of banned azo-dyes in Indian textiles meant for exports as well as for domestic sales in 1999. 4 percent of the export textiles contained banned amines and 7 percent of the domestic textiles. This was a significant improvement from the early 90s. (Textile Committee 2002:63). If the ban in Germany influenced the reduced use of azo-ban in India, the influence would be expected to be seen in exporting companies. The smaller presence of azo-dyes in exporting textiles suggests that there has been an influence. The improvement in the domestic sector could also indirectly be influenced of the ban, since the priority of the Indian government to avoid banned dyes probably was due to the ban in Germany. There have not been many more bans of chemicals used in the textile industry, and the ban of azo-based dyes is certainly the most well-known. Visiting one textile producer in India I asked the manager what kind of dyes they were using and he was quick to state that they of course do not use any azo-dyes.

### **7.2.3 Requirement to Disclose Environmental Impacts**

Government regulation may also indirectly lead to environmental improvements. The requirement to disclose environmental impacts (Hansen 2002:195-7) could make companies with bad indicators on toxic waste reduce their waste, just because the information is public. Hanks also emphasize information disclosure, as a means of identifying the desired goals of sustainable development and for monitoring progress in the attainment of those goals (2002). The US experience with information disclosure suggest that companies that are forced or encouraged to publish sensitive performance data soon begin to launch emission reduction programmes. Haufler states that when factories were required “to report on their use of certain toxic substances and those data were publicized in the Toxics Release Inventory, many firms immediately began reducing their use of these chemicals” (2001:44). India became in 1992 the first country in the world to require environmental audits by law, insisting that the results be reported to state Pollution Control Boards (Cairncross 1995). Both Welspun and Continental are in the organised sector, and therefore have to present an environmental report to Pollution Control Board once a year. This could make them more willing to give information about their pollution, since it is



already official. A sign by the entrance at Continental has information about how much pollution the factory generates. This is changed every year when they make a new environmental report.

#### 7.2.4 Corruption

*What do you think is the greatest challenge for Indian companies regarding environment?*

Main is government attitude.

*Government attitude? Why?*

Because they do not support. And about the approval given by the government is not ....

*Sorry?*

If we will apply the pollution control board for the government consent they will not give it.

*Why?*

They want some money.

*Aha, like extra money?*

Yes extra money.

*So even if you are a good company you have to bribe?*

Otherwise they will keep the consent.

(Extract from an interview at one of the factories I visited)

Controls, by restricting flows of commodities or capital, involve high social costs, distort priorities, and involve rationing in some form or the other. Further, controls create opportunities for rent-seeking and bribing on the part of licence-seekers or for the accumulation of social/political power. According to Das, the industrial licence system in India turned out to be an “economic cancer” with “staggering opportunities for corruption” (2002:92-4). Dasgupta also states that the system gave “corrupt officials the opportunity to make money in exchange for licenses and the licence-holders to earn rent from their document, as the supply was limited” (2005:142). While Das wants a liberalization of the licence system, Dasgupta argues that a re-orientation of the system should be sufficient, and criticizes the government for abandoning the system altogether (Dasgupta 2005:142).

Corruption creates a problem for enforcement of environmental regulation. Many of my sources accused officials working at State Pollution Control Board of corruption. They said that it is easy to get a concession if you pay a little bit extra or pay for fake documents. Or maybe they will not even come on inspection. At one factory they

told me that they had to pay extra to get a concession even if they had fulfilled all the requirements. Mr. Saha (IKEA) acknowledges that corruption cannot be ignored, and says that one solution is to check log books of ETP to see that they have been running. Corruption at Pollution Control Board may also limit the effect of requiring environmental reports, since the reports may not have correct information.

### **7.2.5 Subsidies**

If firms were forced to make an additional investment in new technology to reach certain standards, some firms would be forced out of business (Stuligross 1999:394). When I asked Mr. Sarovar (Welspun) how the government can provide incentives to make the Indian textile industry more eco-friendly, he answered: “By subsidising on cleaner technology and pollution control equipment and by setting up common effluent treatment plants (CETPs) in industrial areas”. Mr. Agarwal (Continental) said that there were no CETPs in his area and that the government could help the textile industry by providing this. In the South there have been established CETPs, but the initiative was taken by local authorities, and was not subsidized by the government (Mr. Saha).

The problem with subsidizing is firstly that the money has to come from somewhere, and secondly they have to be distributed in a fair way (without corruption) and thirdly, the money will end someday. It is a challenge to make a sustainable project (like setting up a CETP) based on subsidies, because the factories using it has to feel ownership towards the CETP to take care of it after it is erected, otherwise it will stop being used when the government’s subsidies comes to an end. At Centre for Science and Environment in Delhi I have seen photos of CETP already out of order after a short time and heard about CETP not being used in a proper way. It is very common to find coloured rivers and drains in textile industry areas. The unregulated textile sector often discharges effluents sans treatment (DTE 2005:34). But this does

not mean that CETP can't work, Tiripur<sup>11</sup> is often used as a showcase of how it can work.

On April 1, 1999, the Government of India (GOI) implemented the Technology Upgradation Fund (TUF) to spur investment in new textile and apparel technologies (Shetty 2001). "The GOI policies intended to address the structural deficiencies of India's textile and apparel industry, including the TUF scheme, have met with limited success so far" (Shetty 2001:ix). The TUF scheme has lately got better conditions<sup>12</sup> and managers both at Welspun and Continental are planning to use the scheme for investments in 2006. Mr. Sarovar (Welspun) said that the TUF scheme is "very good. The TUF is easy financing with low interest rates". The scheme is not an environmental policy, but the side-effect could be positive for the environment, if investment in new equipment is more eco-friendly. I will argue that the TUF scheme should have included environmental criteria in their criteria to which equipment should be subsidized. This shows the importance of collaboration between departments, in this case the financial and environmental department, to encourage a more environmentally friendly industry. It should also be noticed that subsidies may harm the environment, for instance by subsidising natural resources like water and electricity. This has been and is to some extent still usual in India. Undervaluing natural resources usually leads to inefficient use.

## 7.2.6 Taxes

Mr. Sarovar (Welspun) argued that government support to the Indian textile industry should be better. He wanted more liberalization and tax reforms to support the industry in upgrading their technology. In addition to subsidies to the handloom and

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<sup>11</sup> "Environmental Management in the Hosiery Textile Industry: The example of Tiripur, Tamil Nadu 2002" is a video produced by Centre for Environment Studies at Anna University, Chennai.

<sup>12</sup> "With effect from 6<sup>th</sup> November, 2003, an additional option has been provided to the powerloom units to avail 20 % capital subsidy under TUFS in lieu of 5 % interest reimbursement/ 15% CLCS-TUFS on investment in TUF compatible specified machinery subject to a capital ceiling of Rs. 60 lakh and ceiling on capital subsidy is Rs. 12 lakh. The capital ceiling for machinery has been increased from Rs. 60 lakh to Rs. 1 crore and the ceiling on capital subsidy has also been increased from Rs. 12 lakh to Rs. 20 lakh w.e.f. 13.01.2005" (Ministry of Textiles 2005:4).

powerloom sectors, the sectors also have benefited from various tax exemptions. The policy has been liberalised, but changes in tax structure can still be done. Taxes are an option for the government to encourage 'greener' production. Equipment with cleaner technology could have lower taxes than more polluting counter-parts. Or tax reductions could be given to firms who could demonstrate an improvement in environmental operational practices. However, I am not sure how effective tax reductions could be in India, since the tax system is not function very well at the moment. Many companies in the decentralized sector are for instance not paying any taxes.

### **7.2.7 Infrastructure**

India's lack of infrastructure is often mentioned as a challenge for the industry. But I will argue that it is also a challenge for the environment. Disposal of sludge is mentioned by both Mr. Saha (IKEA) and Mr. Agarwal (Continental) as one of the greatest environmental challenges for Indian textile producers. At Continental they have been storing the sludge on their own property for five to six years. The storage is supposed to be temporary according to the environmental report (Continental 2005). The government does not take it away and there is no land filling for hazardous waste in Continental's area (Mr. Agarwal). To store hazardous waste on factory property is not a good solution, since hazardous waste can give big environmental problems if they are not stored in a correct way. If rainwater is able to get into the storage it may dilute into the ground and in the worst case into the ground water. I did not see the storage of the sludge, so it is possible that Continental is storing the sludge in a proper way, but for many other companies with fewer competences on the environmental harms sludge can lead to, the land fill on their property might not be stored in a proper way.

In India it is usual that each production unit has a power generator, mostly run on diesel. The reason for owning power generators is that electricity infrastructure is not good enough and producers can not afford to have black outs (which happen many times every day in Delhi). At Welspun they were in September 2005 using a power-generator fuelled on oil. Welspun has already installed gas based turbines but have been waiting for the gas-line to come since January 2005. When I was there, the

pipeline was still 10 km away and they had been told that the pipeline would be there in 2006. The use of gas based turbines instead of oil based power-generators will both gain the environment and decrease the costs, but the lack of gas pipe-lines makes it impossible to consider using gas instead of oil for the power plant.

### **7.2.8 Providing Information**

Agarwal (Continental) states that the government could help the textile industry by educating them through seminars. Producers in the decentralised sector often lack education and information about environmentally sound production, and awareness about the consequences of use of various chemicals (Textile Committee 1994:17). The Textile Committee is supposed provide information on environmentally friendly production to the industry, and in their publication 'Window to the future' (Textile Committee 2002) they list up different places they will have lectures for the industry. I don't know if the task is too big for them (which would be reasonable considering the vast amounts of small textile producers), but at Continental the manager told me that Textile Committee has never been in his industry area to give any seminar or information in 30 years he has been in the business. This could give an indication that there might be a troubling shortage of information in the region on environmental responsibility, environmental management and other relevant topics.

Pratt and Fintel argue that lack of information about eco-friendly production and technology is an important reason for not investing in pollution prevention that can provide financial returns (2002:49-50). Gupta claims that the Textile Committee has been helping the industry to get knowledge about quality standards and social audits, "but keeping in mind the magnitude of the industry, there is a need to enhance the reach of these services to a much larger audience" (2005). I am not sure if the Textile Committee is not having many lectures, or if they are not good at marketing their lectures to the industry. When I visited the office of Textile Committee in Delhi, I got the impression that it is not an important institution in India. The office is far outside the centre of Delhi, in an industry area, not an area with other official offices,

and the office was very small and insignificant looking. I hoped to get information about the textile industry and the environment from them, but the books and brochures<sup>13</sup> were not very helpful and one man even asked if I could help him to get access to the library of Centre of Science and Environment (where I was an internee), because he had heard that they have many books on this topic.

## 7.3 Civil Regulation in the Indian Textile Industry

We should remember that stories of NGO-driven corporate environmentalism are fresh straws in a rotten haystack of unaccountable and irresponsible global capitalism. The unsustainable reality for billions of people on earth today nonetheless compels us to clasp at these straws of hope as potential catalysts for more sustainable and equitable world futures (Murphy & Bendell 2002:240).

As I discussed in the previous chapter, the importance of NGOs as drivers to corporate environmental improvements are debateable, although most researchers argue that NGOs do have some influence. Murphy and Bendell are not very optimistic, but still recognize the possible role of NGOs. The growth of NGOs and the emergence of consumer politics are allowing a model of civil regulation to develop, “where organizations of civil society, such as NGOs, set the standards for business behaviour” (Murphy & Bendell 2002:253). NGOs have the ability to legitimize the claims that a producer is environmentally friendly, or inform the public that the producer is not environmentally friendly. But how much power a NGO have will vary a lot between all the different NGOs. What NGOs have in common, is that they are important contributors to the global discussion on TNCs and environmental regulation.

As the 1990s unfolded, companies in the textile industry came under increased public scrutiny (Zadek 2004:39). One of the striking characteristics of the recent growth of codes of conduct is the tendency for them to be concentrated in particular

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<sup>13</sup> The Textile Committee is supposed to give information on eco-friendly textile production to the industry in India. Their only publication on Environmental Management is a copy of US EPA publication from 1996, and

sectors, the textile industry being one of the leading sectors (Jenkins 2001:19). Codes of conduct are often concentrated in sectors where brand names and corporate image are very important, and where production costs often make up a relatively small part of the final product price (Jenkins 2001:27). Brand names are important to companies that sell clothes or home furnishing. These items are usually relatively inexpensive and design and marketing takes up a big part of the final price. This means that the products Welspun and Continental are producing are in a consumer sector that emphasizes codes of conduct. But it is mainly IKEA as a brand that is facing the threat of civil regulation, not the producers.

The environmental movement in India has had some successful campaigns to reduce pollution but a lot of pollution is never addressed by NGOs in India. Transnational NGOs have collected evidence on how TNCs are exploiting workers and the natural environment in India but targeting mainly TNCs and not the producers in India. One interesting feature with the civil regulation in India is that NGOs several times have used hard law through public litigation to get results. The approach of public litigation has resulted in companies being forced to be more environmentally friendly or/and to pay fines. If NGOs have to go to the extreme of using public litigation to get any result, I suspect that they do not have a lot of power. One reason for this could be that NGO campaigns usually target a company's reputation. Reputation then becomes a condition for successful campaigns, which makes it difficult to attack companies that are less dependent on reputation. I will argue that reputation is not an important feature of many companies in India, since they focus on production instead of design and marketing. In section 7.6 on reputation I will continue to look at how important reputation is for Welspun and Continental.

Mr. Sarovar (Welspun) argued that the textile industry will gradually be more environmentally friendly, not only due to better enforcement, but also because the Environmental Movement is stronger. I do not have any information about NGOs pressuring Welspun or Continental, but at least the manager at Welspun

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the chapter describing the industry and legislation in the US is not very relevant in India.

acknowledges that the environmental movement can pressure industry. Even if they have never been pressured, the risk of being pressured could still be an external factor for Welspun and Continental to be more environmentally friendly.

### **7.3.1 Are Continental and Welspun likely to be Pressured by NGOs?**

Large firms, multinational companies, market leaders and “dirty firms” face a relatively high risk of getting the attention from NGOs (Stoeckl 2004:152; Delmas & Toffel 2004:215). Continental as a small producer and not particularly dirty faces a relatively low risk of getting the attention from NGOs. Welspun on the other hand is a market leader and a large company, and may therefore face a relatively higher risk. But even if Welspun is a large producer, the brand of Welspun is not well-known to customers and it is not a multinational company, only supplying TNCs. I will therefore argue that Welspun faces relatively low risk of getting the attention from Transnational NGOs, but could face some risk of attention from local NGOs. I will give one example of a potential NGO pressure facing Welspun.

Centre of Science and Environment<sup>14</sup> in Delhi is planning to make a ‘Green rating report (GRP)’ based on a large number of indicators that CPCB are not monitoring. GRP is an attempt to present a market-oriented frame-work by which the environmental impacts of industrialization can be measured and monitored. GRP rates the environmental performance of major companies within an industrial sector and disseminates this information to the public. Since Welspun is one of the largest producers in India, it will probably be included in such a rating. On one hand the rating provides a reputation-linked incentive to a company to become environment friendly. On the other hand, it pressures polluting industries to improve, as the ratings are brought to the attention of everyone, from local community to local

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<sup>14</sup> CSE is a non-governmental organization. By means of ‘knowledge-based activism’ it aims to promote sustainable natural resource management. The centre carries out scientific research on the basis of which environmental campaigns are initiated. In this fashion, CSE raises awareness among the Indian population concerning environmental matters and put pressure on the government and industries to implement environmental regulation in a democratic way.



media, and from politicians to regulators. The experience from previous ratings<sup>15</sup> shows that the companies rated have taken initiatives to improve their environmental performance (Bhushan 2004:3-5). The problem with rating initiatives such as GRP is that CSE has limited resources to monitor the textile industry in India, and have to choose to rate only a few of the largest producers. But their previous ratings indicate that disclosing information and making the information accessible to the general public could encourage a more environmentally friendly production.

### **7.3.2 Indirect Pressure from NGOs (via IKEA)**

NGOs have different ways to fight for their agenda, but cooperation with industry has become increasingly common. I didn't get any impression that either Welspun or Continental are in contact with any local or international NGOs, but IKEA collaborates with different NGOs. IKEA has in the past been named for selling a teddy-bear containing tin-organics compounds (Frithiof 2005), and it could affect IKEA's reputation if a similar issue would come up again.

I will argue that Welspun and Continental are indirectly influenced by NGOs in two ways. Firstly NGOs are contributing to setting the agenda on corporate responsibility, influencing what business should focus on. Secondly, IKEA's collaborations with NGOs influence IKEA's codes of conducts given to its producers. It can be argued that Welspun and Continental are part of the same "epistemic community" as IKEA since they have close contact when collaborating on orders. This contact may have led them to share the same view and perspective on environmental friendly textile production, which in turn IKEA maybe got from NGOs. In the next section I will look more closely at the collaborating between IKEA and Welspun/Continental.

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<sup>15</sup> So far GRP has rated four industrial sectors Pulp and Paper sector (1997 and 2002), Automobile sector (2001), Chlor-alkali sector (2002) and Cement (2005). The Textile sector is planned to be rated next.

## 7.4 Demand from Welspun and Continental's Customers

Welspun produces terry-towels and Continental produces home furnishing items, like for instance bed-covers and cushions. 93% of Welspun's production is exported. Among Welspun's biggest buyers are Wal-Mart, Kohl's, Federated, Target, IKEA, Tesco, Goezze and Sheridan (Mr. Sarovar). Continental is 100 % exporting and IKEA is their major buyer (Mr. Narain). Welspun and Continental's products are sold to consumers in Europe and USA. According to Cairncross consumers in the West have started to include environmental criteria when choosing what product to buy (1995).

### 7.4.1 Consumers in the West

Consumer interest in green products continues to be highly variable between products. According to Perry and Singh, goods such as washing detergent and certain types of packaging attract significant environmental concern, while clothing remain less susceptible to green marketing (2002:127). The items Welspun and Continental produces may sometimes be marketed with eco-labels or as 'green products'. The textiles with eco-labels so far are mostly baby-clothes, underwear and bed-linings, since these are products the consumer are concerned could contain any harmful chemicals. Welspun and Continental's products have the oeko-tex label and ISO 14001 certificate. The oeko-tex label does not say anything about how environmentally friendly a product is produced; only how little chemicals are left in the end product. ISO 14001 is unknown to most consumers, and it is used to market the product among buyers, not consumers. Also ISO 14001 does not directly say anything about how environmentally friendly a production is, since it is just a guarantee of an environmental management system. However, both ISO 14001 and oeko-tex are very good indicators for the production being environmentally friendly. And it is of course possible to have an eco-friendly product without an eco-label. At the moment I do not consider Welspun and Continental's products to be marketed as typical 'green products' towards consumers. However, it is still an important aspect of these products that they are eco-friendly, because buyers sell their products with

the guarantee that they are produced according to their ‘code of conducts’ (which have environmental criteria).

Who are actually buying the products Continental and Welspun produce? I do not have knowledge about all of their customers, but some of them are Scandinavians in IKEA stores. According to Cairncross, the greenest of the green consumers are also the richest (Cairncross 1995:183). Ethical consumerism, like other forms of social behaviour, is also a means of establishing and reinforcing identity. Most customers would agree that they do not buy IKEA’s products to establish an identity as ‘green consumers’ and that the main attraction of IKEA is its price-competitiveness. Why does it still matter if the products at IKEA are eco-friendly? Although most Scandinavian consumers do buy products that are not eco-labelled they still prefer that the product is not produced un-ethically. I have not analysed IKEA’s<sup>16</sup> reasons for focusing on environmental criteria, but I think this is one important reason. My conclusion is that Welspun and Continental are not more environmentally friendly because consumers demand eco-labelled and ‘green’ products. On the other hand, Welspun and Continental could be more eco-friendly because buyers like IKEA demand that the products are produced according to environmental criteria. I will therefore continue to look at how buyers might influence how environmentally friendly the production at Welspun and Continental is, using IKEA as an example.

#### **7.4.2 The Responsible Buyer**

If a retailer can ensure that the stitching along the seam of every pair of trousers delivered to it are accurate to the millimetre, then it seems to me quite unbelievable that they cannot ensure that basic and internationally agreed standards in the workplace are adhered to (Neil Kearney, the Secretary General of the International Textiles and Garment Worker Union as quoted by Zadek 2004: 127).

Why is it so difficult to ensure that ‘codes of conduct’ are being implemented? In developing countries, consumer power and public awareness may be relatively weak,

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<sup>16</sup> It would have been interesting to investigate why IKEA focus on environmental criteria as a buyer, but this is outside the scope of this thesis.

state regulatory authorities may lack independence as well as human and financial resources, business may not be obliged to disclose basic information, and NGOs may be relatively few in number or lack the capacity to monitor corporate activities (Utting 2002:277). It is therefore a great challenge for buyers to make sure that the production is environmentally friendly. Welford is sceptical about international buyers taking environmental responsibility over production in developing countries, because it is easy to hide such responsibility in these countries (2002:138). Companies usually have a 'code of conduct' to show how seriously they take the challenge of being responsible. I asked a manager at a textile factory if any of his buyers were demanding environmental standards. He answered "yes" and started to talk about different social standards for workers (working hours, protection from sewing machines and cutters, no workers below 18 years...). I asked again if there is any specific demand on environment standards, and he said that maybe around 5 percent of the demand from buyers concern environment standards, like that they should have effluent treatment plant. He claimed that buyers are more interested in labour conditions and that they think that the environment is the government's responsibility (anon.). His description of buyers is quite similar to the impression I have got after being in touch with different buyers in Norway. Only a few companies follow up on their codes of conduct, many buyers only give the codes together with other criteria for an order and a signature from the buyer is enough to secure that the production is done according to the criteria.

Mr. Agarwal (Continental) said that his company become environmental friendly motivated by IKEA. He said that before it wasn't too much stress on the environment, it started around 1998-99. Mr. Narain (IKEA) joined in the conversation and agreed that the environmental awareness started in 1998. He also said that from 1998 IKEA became their major buyer, and that this is one reason why IKEA has been more dominant on environmental criteria. Mr. Agarwal said that the demands from IKEA are not very different from demands from other buyers, but IKEA is more proactive in demanding that environmental criteria should be complied with much earlier. Other companies follow after. "But it is beneficial for us. If we say to any other customer that we deal with the IKEA, they say that then everything should be ok" (Mr. Agarwal). At Welspun Mr. Sarovar answered me what was his experience with environmental standards from buyers: "IKEA,

specifically, is demanding. Others also, of late, since 2002, are making it a habit to look into environmental aspects during their Compliance Audit as well as inspection”

Critiques argue that ‘codes of conduct’ are products of corporate ‘green-wash’ (no action, just talk). Even if some of IKEA’s codes can be seen as lofty principles I have taken as a presumption that it is IKEA’s intention to work towards the goal they have stated in their ‘codes of conduct’: “At IKEA, we shall always strive to minimise any possible damaging effects to the environment, which may result as a consequence of our activities. Therefore, IKEA and its suppliers shall continuously reduce the environmental impacts of operations” (IKEA 2002). I will therefore look at how IKEA collaborates with its suppliers to reach the goal on environmental criteria.

### **7.4.3 Supply Chain Management**

For buyers to successfully tackle environmental problems in production, there already has to be a well functioning relationship between the buyer and supplier (Preuss 2005:125). Although there are many possibilities for buying companies to collaborate with suppliers on tackling environmental issues, the most usual approach is to only introduce criteria the suppliers are not allowed to fall below (Preuss 2005:133).

IKEA is a well known example of a company that has placed considerable emphasis on monitoring of suppliers. IKEA has developed different manuals and guidelines, outlining the requirements that the suppliers need to comply with and supporting the suppliers in drafting an action plan. The process is accompanied by visits at regular intervals (Nedergaard 2002 referred to in Jeppesen and Hansen 2004).

When I was at Continental and Welspun I saw that IKEA’s employees wrote reports after each meeting, on future plans and on what they had agreed on. Environmental goals would be included with the other agreements. Via a network of Trading Service Offices, IKEA supports their suppliers to improve their operations. The IKEA Trading Service Offices has the direct responsibility to support and monitor the suppliers (IKEA 2002). IKEA has a team with three people working in close contact with each producer. Buyers may offer technical assistance to suppliers in order for them to meet environmental standards. “This can either be assistance in

hardware solution or it can be guidance as to management and corporate governance” (Jeppesen & Hansen 2004:264). The IKEA employees working at the Trading Service Office in Delhi I met were in contact with the producers continuously, often visiting the factories more than once a month. Mr. Agarwal (Continental) said that there are different types of seminars run by IKEA and that if they have any problems in developing products or production they can call their IKEA contact whenever they want to get assistance. When we were driving towards Continental, IKEA’s employee got several calls from different producers. According to Nedergaard, IKEA supplies new machinery to suppliers, and if suppliers inquire about technical support in specific areas, IKEA also contributes in this area (Nedergaard, 2002 referred to in Jeppesen and Hansen 2004). Welspun and Continental have not been supplied with any machinery, but especially Continental has received technical support.

When I asked about what kind of lubricating oils they use for their powerlooms, Mr. Garg (Continental) said that they have a safety sheet with info about the product and first aid purpose. I understood that IKEA has demanded that Continental must have this kind of safety sheet. At Welspun Mr. Harsharan (IKEA) were checking security criteria thoroughly. I got the impression that IKEA has influenced the safety system at both factories.

#### **7.4.4 “Policy Coherence” in IKEA**

Only four Scandinavians are working at the IKEA office in Delhi. There used to be more foreigners before, but at the moment mainly Indians work there because it is company policy to have more local leaders (Mr. Harsharan). I will argue that IKEA’s extensive use of local employees strengthens the implementation of ‘codes of conduct’, since they will have less cultural problems in collaborating with suppliers. It is also an advantage that local experts can stay in a job for a long time and continuously improve the collaboration with suppliers, while foreign experts often stay a limited time-period and do not have the same cultural knowledge. The challenge for a big company as IKEA is to make sure that environmental strategies decided by the top management, trickle down to the local employees. To avoid contradiction of policy in the firm it is important to mainstream or internalize CSR

culture and policies throughout the corporate structure (Utting 2005b:12). My impression is that IKEA has done a good job to ensure 'policy coherence'. Both Mr. Harsharan and Mr. Narain had a good understanding of IKEA's environmental policy, and they seemed to be proud to work for a company with ethical guidelines. When Mr. Harsharan compared working for IKEA with working for another Indian textile company, he claimed that it is good that some Scandinavians work at the Delhi office because it would be different without them. According to him, they have introduced the Scandinavian mentality, with more focus on environment and social responsibility.

#### **7.4.5 Environmental Criteria Included in an Order**

According to Mr. Saha (IKEA) buyers are demanding more on environmental criteria and IKEA was the first to demand environmental responsibility. He said that IKEA is much more proactive than other buying companies, but others follow after. On choosing suppliers, Mr. Saha states that "the cheapest supplier will not necessarily be the best". Other qualities than low price makes Welspun an attractive producer. According to Mr. Harsharan (IKEA), Welspun have huge capacity, always delivers on time and have slightly higher prices than other Indian companies. The fixed costs are higher because of higher salaries to more educated employees. It is not usual that environmental criteria are the most important criteria in the choice of suppliers. The companies studied by Preuss had conventional factors as price, quality and delivery conditions as the dominant criteria for choosing suppliers (2005:129). This is also my impression after visiting Welspun and Continental. Price, quality and delivery-condition determines first if there can be any business transaction at all. Mr. Harsharan for instance focus on that lead-time at Welspun has to come down and mentions that producers in Pakistan have shorter lead-time. After complying with the conventional conditions, it is possible to demand some environmental criteria as well. Jeppesen and Hansen argue that:

high environmental capabilities are rarely the sole, or even dominant, criteria for obtaining supplier status; rather, buyers see environmental capabilities as a proxy for a strong organization, quality orientation and ability to deliver according to schedule (Jeppesen & Hansen 2004:271).

It is quite possible that buyers see Welspun's environmental standards as a proxy of their professionalism. Preuss recognizes that "the use of environmental management standard certification is currently limited to individual industries, for most companies an insistence on ISO 14001 ... would restrict the number of eligible suppliers too much" (2005:129). Although both Welspun and Continental have ISO 14001, it would be impossible for IKEA to demand this of all of their suppliers in India, since very few textile producers in India have this certification. But they can of course encourage their suppliers to get ISO 14001. One way to avoid a limited selection of suppliers by having too strict demands is to demand that the producer is willing to work towards a certain standard. If they are not even willing to make any changes, the supplier should not be chosen.

When IKEA deal with a new supplier, he has to accept the environmental requirement. If he is not able to do that at the moment, they have to see if they can come up to the appropriate level. If they don't want to discuss necessary improvements, IKEA will not discuss business with them (Mr. Saha at IKEA).

If the supplier is willing, but unable at the moment to meet the requirement, the usual procedure is to make a plan on how to reach a certain goal and within a certain time-limit. In that way IKEA can encourage producers to work towards environmental goals. Murshid found that this approach is quite usual among importers. He states that "according to several importers the most important thing is to have an initial commitment to improvement" (Murshid 2003:14).

#### **7.4.6 The Size of an Order**

Implementing codes of conduct can be more difficult when the importer has only a small share of the factory's orders. The factory will take the codes of conduct more seriously the more the importer is sourcing. According to one importer, if they buy less than 10-20 percent the factory does not care about them (Murshid 2003:21).

According to Lampa at H&M they are intentionally keeping their orders small, because they don't want any producers to be dependent of them, in case they are not able to give them any new orders (Lampa 2004). IKEA has 12 % share of Welspun's production. From 1998 IKEA has been Continentals major buyer. They are shipping almost 50 to 60 percent of their capacity to IKEA (Mr. Narain). When I asked Mr.



Saha (IKEA) how important he thought IKEA is as a customer compared to Continental's and Welspun's other customers, he answered that IKEA have a big impact on Continental with 40-50 % of their orders, while Welspun has a lot of other customers and IKEA only has 8-10 % of their orders.

#### **7.4.7 Long-Term Collaboration with Suppliers**

“We strive to build long-term relationships with suppliers that share our commitment to promote good practices, and who want to grow and develop together with IKEA” (IKEA 2002). Lindefors argues that it should be possible to give better conditions to suppliers, without getting higher costs, by establishing long-term, more stable agreements with them. In that way the factory gets a better overview and can plan the production easier (Lindefors interviewed by Gaarder 2004:102). Investment in more eco-friendly production is usually considered in a long-term perspective. It is therefore easier for a producer with stable agreements with buyers, to consider this kind of investment. Mr. Harsharan from IKEA told the managers at Welspun about the orders IKEA is planning to give them the next 84 weeks. This information gave Welspun the possibility to be more flexible about when they should produce the orders, and adjust the production of IKEA's orders in accordance with other orders.

Both Welspun and Continental have supplied IKEA since 1995/6. For Continental I will argue that the long relationship, in combination with IKEA being their major buyer is an important reason why they have environmentally upgraded their production. The long relationship has given IKEA good possibilities to influence Continental. Considering the stress IKEA has put environmental requirements, I will argue that they have influenced Continental. IKEA will probably continue to use Continental as a supplier, since they have used resources on improving the environmental conditions at Continental. It makes sense to keep the investment in one producer instead of finding another supplier where they would have to do the same. Murshid argues that “importers that have longer relationships with their buyers will usually (also) have more influence and better prospects for social compliance” (2003:21). Having small orders with a lot of different suppliers, gives the buyer less influence on the supplier and it becomes more difficult to set long-term goals for improvements. The relatively small orders (compared to total production) IKEA has

at Welspun has given IKEA less power to influence them. I will therefore argue that the long relationship between them could rather be because Welspun was more eco-friendly in the first place, and not necessarily because IKEA has invested resources in improving environmental conditions at Welspun.

I suggest that buyers should involve themselves more with the supplier's production and have a dialogue with the supplier, because it is easier to make changes in production on a longer-term and when both parts contribute. This interactive approach could provide international buyers with an opportunity to shift from a negative policing role in relation to their suppliers to one based on mutual assistance and development. Luken and Stares argues that benefits of this approach are "higher levels of compliance, lower monitoring costs and the chance to create more stable long-term supply relationships" (2005:51).

#### **7.4.8 Some Critical Remarks on Buyer's Responsibility**

There exist thousands of different ethical guidelines, resulting in a lot of extra work for a factory that must relate to many different guidelines. Lindefors argues that there should be a common standard (Lindefors interviewed by Gaarder 2004:102). At Continental I saw many different guidelines hanging on the wall, but I heard no complain about different standards. Complying with IKEA's standards was according to Mr. Agarwal enough to secure other buyers. Leif Iversen, leader at IEH (Institute for Ethical Trade in Norway) claims that there has been a considerable change in verification of guidelines the recent three years. Increasingly more companies use third part inspections and it is more common to involve the management and the employees at the supplier to achieve environmental improvements. An inspector can only be at the factory for a few days and usually tick of different indicators on a scheme, while an educational program could give a lot more information and eventually lead to a change in business culture (Iversen interviewed by Gaarder 2004:114). Also Utting stresses the need for independent evaluation and voluntary initiatives by business to have third-party verification built into them (2000:14).

“Suppliers *must* comply with national laws and regulations and with international conventions concerning the protection of the Environment” (IKEA 2002). Jenkins argues that “a code of conduct that requires a supplier or subsidiary operate within the law is not a very stringent one” (Jenkins 2001:25). IKEA do have many other requirements and its ‘code of conduct’ can therefore still be considered as stringent, but the interaction between national laws/regulation and codes of conduct should be noticed. IKEAs decisions on chemicals requirements are based on legislation in sales countries and market pressure/expectations; “the strictest environmental demands in any of our markets is made IKEA standard” (Frithiof 2005). Mr. Saha said that because Effluent treatment plant (ETP) is already demanded in government regulation, it easier for IKEA to demand that all suppliers should have an ETP. 5-6 years back the government was not too serious about the regulation, but it is now, and this makes it easier to find suppliers who comply with IKEA’s environmental standards. Managers at Welspun said that interaction with customers gives them knowledge about legal requirements and regulation in other countries. These requirements are translated into product quality requirements. I think that it can be a good argument for stricter regulation in the west, that these might influence on ‘codes of conduct’ and standards for exporting producers in India.

There are potential reputational risks as well as gains associated with having a more transparent supply chain in the face of having made often over-ambitious commitments (...) There is little evidence that good performance is consistently rewarded in the market for products and services by customers being willing to shift towards a particular company or brands as opposed to being willing to shift away where poor ethical performance is demonstrated (Zadek 2004:132).

Transparency is a challenge for most buyers; they have to give consumers enough information to trust that products have been produced in an ethical way, but at the same time not reveal too much information. This is for different reasons. One reason could be that implementing ‘codes of conduct’ is very challenging, and even if companies like IKEA have started this process a few years ago, there is no reason to believe that you can’t find any violations on their requirements. This kind of information could overshadow the good work that has actually been done. Most companies (including IKEA) do usually not inform who their suppliers are or any detailed information about production. Companies claim that this kind of information

is “business-sensitive”, and if anyone could get knowledge about their producers, competitors would try to get hold of them. If that happened, it would be a great loss to the transparent company, since it usually takes a lot of time and effort to find good producer and even more effort if they have collaborated with the producer to make it become more environmentally friendly. Some companies, like Nike and Stormberg have chosen to publish who their suppliers are. The manager at Stormberg says that they have had no problem with losing their suppliers to other companies, because the suppliers are satisfied with their collaboration (Olsen 2005).

The closer we get to the point of extraction, the more difficult it will be for firms to off-set the costs of environmental measures. As Third World enterprises typically are engaged in upstream activities with low profit margins, environmental requirements will tend to further undermine their competitive position, whereas the TNC is positioned to reap the commercial benefits in the markets by way of innovation and product differentiation (Jeppesen & Hansen 2004:266)

It is therefore a paradox that in many cases, it seems like the costs for environmental improvements are borne by the suppliers, even if the standards come from TNCs. Utting state that “CSR supply chain management may be a way for TNCs to pass costs on to suppliers” (2005b:5). He mentions that some suppliers in developing countries has started complaining that the basic term of their contracts (price paid, quantities delivered and delivery dates) remain tight even if buyers demand higher environmental standards. Some suppliers also complain that they do not get enough managerial training and advice on how to comply with higher standards (Utting 2002:273). This impression is also found by Murshid in Bangladesh. He argues that “it is a problem that importers invest in little beyond monitoring. They are not investing in follow-ups: they do not go back, check again, and find a corrective plan. There is generally a lack of strategic planning among the importers” (2003:18). According to Joel Lindefors, coordinator at the Swedish branch of Clean Clothes Campaign argues that one of the big problems with ethical guidelines is that they are not integrated in the buying strategy. The companies have own departments working on CSR, where the employees have great interest in this topic. At the same time, the buyers only focus on lower prices and shorter delivery time, without including ethical criteria in their supplier selection. Lindefors claims that the buying departments undermine and makes it impossible to have ethical guidelines (Lindefors

interviewed by Gaarder 2004:101). I will argue that to implement environmental guidelines it is important for CSR managers to collaborate closely with buyers and have the support from top managers that environmental criteria should be included in the assessment of suppliers. I argued that IKEA has done a good job implementing their 'code of conduct', and even if the basic terms of the contract are not changed, at least they have invested resources in collaborating with suppliers.

## 7.5 Consensus within the Indian Textile Industry?

Haufler and Hansen argued that "consensus within the industry" and peer pressure can be an important factor for companies to be environmentally proactive (Haufler 2001, Hansen 2002) I do not have enough empirical evidence to state how Indian companies consider environmental responsibility, but I will give some examples to indicate what the situation might be at the moment. In a poll on corporate responsibility in India 73 percent of company executives perceive "not harming the environment" as a role of companies (Kumar et al 2001:10). The environment seems at least to be an issue for most companies in India, but perhaps not a high priority in the textile industry. My visit to the office of The Indian Cotton Mills' Federation gave me the impression that environment was not a priority; their focus is on improving the cotton yields (Nair 2005). A manager at a textile factory told me that only 5 to 10 % of the industry is interested in the environment. The rest only cares about earning money, and will not invest in eco-friendly equipment unless they are forced to (anon.). It is off course possible that he gave this statement to improve my impression of his company, to prove that they are doing much better than most other companies. I will argue that you can find both the best and the worst examples on environmental practices in India. The question is which of the textile companies might most influence Welspun and Continental? Managers at Welspun and Continental told me about other Indian companies that have improved their environmental practices. Mr. Agarwal (Continental) told me that some companies have begun with zero-discharge and he will consider it when the technology becomes less expensive. Mr. Sarovar (Welspun) told me that the consultant from KPMG, assisted Arvind Mills (one of the biggest textile companies in India) into being accredited with ISO 14001, before he consulted Welspun. The managers are

paying attention to what their competitors and other important producers in the industry are doing. I will therefore argue that ‘good competitors’ is one external factor influencing the producers. They can see what others are capable of doing, and emulate the behaviour of other companies. Since Welspun is a market leader and among the largest producers in the world, I will argue that it is important for the company to be among the leaders in environmental issues also.

When companies that are relatively dominant in their respective markets have adopted environmental practices, they have sought to avoid it being a cost-disadvantage by pressuring ‘follower’ competitors to imitate their approaches (Zadek 2004:33). If Welspun’s position in the market is threatened by competitors, how could it affect Welspun’s environmental approach? Maybe Welspun will try to pressure other companies to imitate their approach? In addition to Trident and Sharda Terry, Chinese producers are competitors for Welspun. I wonder how the Chinese producers prioritising of environmental issues will influence producers like Welspun. Time will show if it will be a comparative advantage to have more environmentally friendly textiles, or if Welspun will experience a cost-disadvantage if the Chinese do not prioritize environment. I will argue that what competitors do have an influence on Welspun and Continental, and that managers at Welspun and Continental so far have seen it as a comparative advantage to be more eco-friendly.

Different networks are also part of the industrial context. Welspun participates in an Environmental cell ‘Green Business’, where they can discuss new eco-friendly technology (Mr. Sarovar). Haufler argues that the business community have changed (2001) and Utting stated that has been more focus on business’ responsibility since the Earth Summit of June 1992 (2000:5). Participating in an environmental cell, managers at Welspun gets to know what other companies are doing and can discuss environmental topics. The interest of a producer in sustainable development and CSR could be a result of participation in the business community where these topics have been part of the conversation. To be ‘part of epistemic community’ means to share the same views and perspective. The business community have changed recently and Haufler claims that “the dialogue in the business world today includes discussion, debate, and evolving acceptance of the role of good environmental practices in business decision making” (2001:46).

## 7.6 The Importance of a Good Reputation

Reputation is the first of the internal factors I am going to look at in the analysis. Civil regulation often “come in the form of activist campaigning which aims to damage companies’ market performance by undermining their reputation” (Zadek 2004:55). I argued in the section 7.3 on ‘civil regulation’ that Welspun and Continental has not been pressured directly by civil society. Since these companies are manufacturing products instead of focusing on design and marketing, as IKEA does, they are less likely to be pressured by civil society. The corporate image is important in another way for Welspun and Continental, than for IKEA. IKEA has established a corporate image as a responsible company to attract consumers. IKEA must therefore trust the producers to comply with IKEA’s ‘code of conduct’ to give them an order. Welspun and Continental are dependent on their reputation among buyers like IKEA, to get the orders they want. I will argue that Welspun and Continental’s environmental standard has given them a good reputation since IKEA recommended these two companies as ‘good cases’. At Continental the manager told me that it gives them a good reputation to be associated with IKEA, because other buyers know that IKEA demands quite strict ‘codes of conduct’. Supplying to IKEA can therefore become some kind of guaranty to other companies that the producer has implemented a certain environmental standard.

A good reputation could make the Governments more at ease in granting planning permission, renewing operating licences, or choosing not to pass constraining public legislation. Staff may be more motivated when the company for which they work is not the subject of public criticism (Zadek 2004:57). Mr. Sarovar (Welspun) said that the younger generation is more aware of environmental issues. To attract the best young professionals it could be an advantage for Welspun to have a reputation as an environmental responsible company.

## 7.7 The Traditional Business Case

The ‘win-win’ explanation suggests that it is possible to be environmentally friendly with ‘business as usual’, with focus on being eco-friendly due to the profit-

maximising principle. It is possible to argue that “corporate environmental and social responsibility is basically a rational business response to ecological constraints and market opportunities” (Utting 2000:20). Milton Friedman is famous (or infamous among CSR supporters) for his claim that corporations only are responsible towards shareholders and to maximise their profit. However Friedman also argued that to maximise financial performance corporations should, if necessary, engage more effectively with stakeholders that can make or break the business. “Friedman always said that businesses should comply not only with law but also with the norms and expectations of the societies within which they operate” (Zadek 2004:53). According to Stoeckl, the firms which have most to gain on environmental improvements are large firms, ‘dirty firm’ and firms that are capable of differentiating products on environmental grounds (2004:152). Textile production, especially wet-processing is very polluting and both Welspun and Continental could therefore be seen as relatively ‘dirty firms’ if they had not done any environmental improvements. Welspun as a large and relatively dirty producer could therefore have gained on environmental improvements. Continental as a small producer has had less incentive to invest in environmental improvements since up-front abatement costs would be higher than for Welspun. In addition Continental as a small company has a lower risk of private litigation. In this section I will try to answer if there are any linkages between Welspun and Continental’s financial performance and how eco-friendly their production is, and how external factors influence the potential linkage between financial performance and eco-friendly production. I will first see if environmental upgrading has given any cost savings in production at Welspun and Continental. Afterwards I will discuss how finances and fiscal policies might influence investment in cleaner technology. Investment in cleaner technology may not directly be related to getting a return and I will therefore give an example of how investment in cleaner technology may be related to investment in a new plant. Environmental standard may also be closely related to quality, and I will therefore comment on this link. Both companies have had the opportunity to differentiate their products on environmental grounds. In the end of this section I will see if Continental and Welspun have had their costs offset by markets. The link between eco-friendly products and markets may also be related to quality and I will therefore discuss if there is any relation between good design and eco-friendly products.



### 7.7.1 Cost Savings in Production

Probably the most persuasive aspect of the new corporate environmentalism is the ‘eco-efficiency paradigm’. Many analysts point out that pollution as a by-product of industrial production is waste – pure and simple. How far the corporate world can go with ‘eco-efficiency’ is a matter of increasing contention. Some claim big opportunities exist (Porter and van der Linde, 1995) while others are sceptical about the extent of win-win opportunities (Welford 2002). Porter and van der Linde even claim that “developing countries that stick with resource-wasting methods and forgo environmental standards because they are ‘too expensive’ will remain uncompetitive, relegating themselves to poverty” (Porter & van der Linde 1995:133). UNIDO’s more than 10 years of experience in implementing cleaner pollution projects in developing countries suggest that the positive case for business responsibility appears strongest in the environmental area as a result of applying cleaner technology (Luken & Stares 2005:51). Looking at three examples from Welspun and Continental I will investigate what opportunities they have had to be eco-efficient and invest in cleaner technology. I will also look at in what way external pressure encourage or restrict the opportunities to be eco-efficient or invest in cleaner technology.

#### *Example 1: The Rolls-Royce Gas Turbine*

In the paragraph on government’s infrastructure I wrote that Welspun has been waiting for some time to get the gas pipe-line to use their new gas based turbines, instead of their old power generator. Although the government can be criticized for not providing the pipe-lines fast enough, it should be acknowledged that Welspun could not have considered using gas in the first place, without the pipe-lines coming in their direction. I will argue that the decision to invest 280 million INR on Rolls-Royce gas based turbines is based on economic incentives. Mr. Sarovar (Welspun) told me that the gas based turbines will be cheaper in use than the oil based power generator and it will give lesser sulphate content, availing carbon credit globally.

### *Example 2: Water-Harvesting, a Show-Case?*

I asked Mr. Agarwal (Continental) if there were any cleaner technology he would liked to invest in if it was less expensive. He told me that he is planning to start water harvesting<sup>17</sup> next year. Mr. Narain said that this was Agarwal's initiative, not a requirement from IKEA. He stated that it will give Continental an advantage because they will be less dependent on public water supplies, which means that there will never be a water shortage. It is possible to collect huge amounts of water during the monsoon, and I have seen villages using water harvesting to improve their agriculture. However, I am not sure how great the effect will be on a factory that consumes 90956 KL water in a year (Continental 2005). It would maybe make more sense to start water recycling, but Mr. Agarwal said that it is still too expensive. He has heard that some companies have started zero-discharge, but that it has turned out to be very expensive. If it becomes cheaper he will consider starting recycling. I asked if water is subsidised. Mr. Agarwal answered that it is almost free and that they are paying by the electricity bills. Mr. Narain (IKEA) explains that water is very cheap in North-India, but expensive in the south. They agree that water is not a problem in the north. It is unlikely that economic incentives are behind the decision to start water harvesting, since water is almost free. Continental has a policy of 'green belt development' where they plant different varieties of trees in and around the factory area. I will argue that water harvesting is a similar policy. It will not be a great investment, and the environmental effect is also limited, but there is some effect. It can maybe be compared to recycling household garbage in Norway. It gives us a better conscious, because we are at least doing something for the environment, and it also gives a signal effect to others that we are considering the environment. In that way water-harvesting and planting trees could be considered to be 'show-cases' of a green consciousness. However, I will argue that this is not a just what critiques would call an example of 'green-wash', but a signal that Continental is considering

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<sup>17</sup> There are various traditional methods of collecting rain water in India, and this approach has been increasingly popular after Centre for Science and Environment collected information on these methods, published a book on water harvesting and have encouraged village projects on water harvesting.

different ways to be more eco-friendly, and maybe the next project will have greater effect on the environment.

### *Example 3: Dyeing*

Dyeing is one of the most polluting processes of textile production. Ruud argues that because natural dyes are much more expensive than synthetic dyes, there is no economic incentive to switch to the more eco-friendly natural dyes (2000:259). Sarovar (Welspun) asked me if I thought that Western consumers would be interested in natural dyed towels. So far this option is considered to be too expensive, textiles dyed with natural dyes are 25-35 percent more costly (Singh 2002:31). Neither Welspun nor Continental is recovering any dyes. There exist technical solutions to recover dyes after dyeing, but this has in general had little success so far. It is both too complicated and too expensive for most producers. Another way to make dyeing more environmentally friendly is to change the dyeing methods to use as little chemicals and dyes as possible. Mr. Narain (from IKEA) is doing a part-time master in Business and Management, where he investigates how chemicals can be controlled better and how the amount used can be more exact. In this way the suppliers will also be able to save money, since chemicals and dyes are expensive. If Mr. Narain is able to get any results of his investigations, he can use this knowledge to suggest improvements at for instance Continental.

## **7.7.2 Finances Influencing Investment in Cleaner Technology**

“Firms are less likely to adopt environmental improvements when, for example, the financial sector imposes high interest rates and short lending terms” (Utting 2002:275). As Pratt and Fintel, in relation to Central America, has seen that a lack of general economic stability leads to shorter-term outlook in business planning and financing. With interest rates in the region hovering between 15 and 40 per cent in real terms and long-term credit severely limited or unavailable, many “common sense” investments that lower environmental impact are priced out of reach (Pratt & Fintel 2002:50). Interest rates are in general higher in a more insecure economy (which is the case in most developing countries), and the loans given are usual smaller because of the higher risk. Loans are given based on the market value of

property or tangible assets, and may not be higher than 30-35 percent of the market value. This makes it difficult for small companies to get big enough loans to invest in eco-friendly technology, especially if this investment is not likely to create a return. I will therefore argue that it is likely that small-scale industry in India has difficulties in obtaining loans to establish ETPs (especially with secondary and tertiary treatment) and to invest in new machines that are less polluting. Agarwal (Continental) has never taken any bank loans to finance new investment, but the firm's revenue has been large enough to invest in upgrading the production and ETP. Sinclair argues that "smaller, economically marginal firms, may have difficulty in accessing external financing to fund environmental improvement projects, even though such projects can reasonably expects to generate a good return" (Sinclair quoted in Stoeckl 2004:146)

The Technology Upgradation Fund (TUF) has been Government of India's policy to spur investment in new textile technologies. Managers at both Welspun and Continental intended to get loans from this fund in 2006, because the interest rates are low and Mr. Agarwal said that 30 percent of the investment would be a subsidy. He is planning to use the loan to buy a new embroidery machine, which will not have any effect on the environment. Since the fund does not have any environmental criteria, it does not directly encourage investment in cleaner technology, but new machines are in general more energy-efficient and dosing the amount of chemicals more exactly. The TUF scheme could therefore lead to some investment in cleaner technology.

### **7.7.3 Fiscal Policies Influencing Investment in Clean Technology**

Difficulties can arise in the economic conditions or fiscal policies (tax, tariff, subsidy), influencing possible economic gains from environmental improvements. The fiscal system may discriminate against the importation and adoption of clean technology. The tariffs placed on imported technology (including "green" and high-efficiency technology) have slowed the adoption of more efficient and less pollution technology by businesses in El Salvador and Costa Rica, where such tariffs on imported equipment hover around 20 per cent (Pratt and Fintel 2002:53). Import

duties in India are being increasingly brought down. Currently, these are around 15 per cent, down from a high of over 130 per cent only a decade earlier (Panthaki 2005b).

Nehru's fiscal policy favouring the handloom and powerloom sectors has influenced the textile industry in India. These sectors still benefit from various tax exemptions and other favourable government policies, which ensure that fabrics produced in these sectors are price competitive against those of composite mills. This policy is one reason why the Indian textile industry still has many small-scale producers, and a lot of old machines, which are usually not efficient and eco-friendly. According to Professor Gulrujani, there has been a change in policy and a liberalising towards a "level playing field".

Fiscal policy may also undervalue the use of natural resources, by giving direct and indirect subsidies for land, water, and electricity. As I showed in example 2, it is usually not economic feasible to invest in cleaner technology that is less water consuming, when water subsidised.

#### **7.7.4 A new Plant and Financially Attractive Environmental Improvements**

Indicators that aspire to measure and predict the financial implications of social and environmental performance are of very differing levels of meaningfulness, credibility, and so relevance to decision-makers. Often the determining factor is the type of investment being considered (Zadek 2004:172).

It makes a difference if a company have to invest in totally new machines, or if it is sufficient to adjust their old machines. It is also easier to prioritise environmentally friendly machines if the company is buying new machines anyway, which is usually the case when a new plant is constructed. According to Sinclair "financially attractive improvements in environmental performance often occur in tandem with a new plant and equipment" (Sinclair as quoted in Stoeckl 2004:146). Newer factories

are more likely to have state of art technology and this technology is in general also more eco-friendly, because machine-producers focus on environmental parameters of their machines<sup>18</sup>. Welspun is building a new factory in Anjar and have taken into consideration eco-friendly criteria, when investing in new equipment. Continental moved to a new factory in 1999. The new factory was established at the same time as they started to focus more on the environment. I will therefore argue that Continental's establishment of a new factory also correlates with the level of eco-friendly technology.

### **7.7.5 A Correlation between Quality and Environmental Standards**

Gonzales-Benito and Gonzales-Benito did an empirically study where they confirmed that “the company’s interest in adopting new developments and leading practices in the production and operations area, is a significant predictor of voluntary implementation of environmental management practices” (2006:94). This implies that a strategic attitude towards improving the production in general, could have a correlation with environmental improvements. Florida et al. found an association between ‘lean’ manufacturing and green manufacturing. They argue that firms that are innovative in terms of their manufacturing process are likely to be the most imaginative in addressing environmental costs and risks. This possibility arises because essentially the same set of skills and procedures are being utilized. It implies that organization may not be accepting new responsibilities so much as making full use of their innovative capacity (Florida, R et al referred to in Perry & Singh 2002:127).

Mr. Saha (IKEA) told me that towel production in general is more organized and has more high-tech machines in all stadiums than other textile products. It could therefore be a correlation between Welspun’s product quality and environmental standards. My impression is that Welspun as a market leader also want to be

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<sup>18</sup> The focus on environmental criteria of new textile technology is evident in professional textile industry

outstanding on environmental criteria. It is also easier to control environmental criteria, when you have good control of quality. The laboratory at Welspun improves their capability to measure a lot of different parameters, including environmental parameters. I will therefore argue that the high quality of Welspun's towel-production could have encouraged the environmental standard they have.

### **7.7.6 Costs Offset by Markets**

In example 3 I mentioned that Mr. Sarovar asked if I thought western consumers would be interested in natural dyed cotton-towels. Natural dyes are 4-5 times more expensive. This is only one part of the final price, but there are very low margins in the textile industry and the product would therefore be more expensive with natural dyed cotton. The same would be the case with organic cotton which is more expensive than ordinary cotton and it is therefore difficult to use organic cotton without affecting the sale price. This means that the consumer must be willing to pay extra for organic cotton or natural dyed cotton. As I argued in the section 7.4 on 'customers', there is no immediate link between western consumers demand and Welspun or Continental being eco-friendly. Buyers are Welspun and Continental's direct customers and I argued that they are increasingly demanding environmental standards. However, so far there are few signs of buyers demanding organic cotton or natural dyed cotton.

Mr. Sarovar claims that a higher price for Welspun's products is not a reason for eco-friendly production. He said that there is not a big price difference and that price is more related to quality. But all of the managers are still certain that it is a competitive advantage for Welspun to be eco-friendly. Welspun focus on the company having ISO 14001 in advertisements. Using an environmental management system to attract buyers indicates that they at least believe that it is an advantage to focus on environment. According to the president at Raymond (large textile producer in India) ISO certifications are "becoming a minimum qualification for approaching

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magazines and on Textile machinery fairs like ITMA.

international buyers. That is not to say that buyers are demanding that factories have these certifications, but it definitely is a selling point, and tells about the company's work processes and its seriousness" (President at Raymond interviewed by Mital 2005). Perceived market benefits seem to motivate producers to obtain certification (Perry & Singh 2002:125) and it is possible to get technical and/or marketing benefits associated with participating in voluntary initiatives (Hansen 2002:195-7).

Mr. Agarwal (Continental) thought that his market has during the last decade been focusing more on products being eco-friendly as compared to price and quality. He said that "I think mind is changed". Mr. Saha (IKEA) would agree with him, he states that there is a global demand among buyers for more eco-friendly production. Not everyone I talked to agreed on this. At one factory I visited, the manager told me that buyers do not have much demand for environmental standards (anon.). Even if there is a demand for eco-friendly production, it does not seem to affect the price. Mr. Agarwal said that buyers do not pay much more for Continental's products if he says that they are environmentally friendly, maybe they pay 2-5 percent more. However, he still claims that it is an advantage for his company to have eco-friendly production. Managers at both Welspun and Continental perceive being eco-friendly as a competitive advantage, yet at the same time buyers do not pay more for eco-friendly products. This might seem to be a contradiction, but I will argue that environmental criteria have become an important aspect for many western buyers, and more eco-friendly producers have the advantage of getting the order in the first place. Buyers are at the same time not willing to pay more for the same product, since a market of green consumers seems to be limited. It is more important not to do anything wrong and be punished for it, than to expect consumers to pay more for a product that is marketed as eco-friendly. "Companies that demonstrate progress can be reward, although to date the evidence indicates that the public is quick to punish and slow to reward" (Haufler 2001:48). It can also increase the risk of NGO pressure if a company commit to a higher standard, because it "simply raises the expectation of the public and increases the attention paid to any missteps" (Haufler 2001:50).

According to Saha (IKEA) it has become easier to find producers in India who accept IKEA's environmental standards. He said that the suppliers are less sceptical towards environmental standards than they used to be. "Before they used to think



that it would cost too much, but now everybody realizes that it is a long term investment. The workers are happier and therefore increase the productivity”. If more producers are willing to accept IKEA’s demand, it could indicate that buyers’ environmental demands have had an effect on some producers to become more eco-friendly in the competition for a buyer.

### **7.7.7 The Relation between Good Design and Eco-Friendly Products**

If firms compete on cost alone, then there is a high probability that standards will not be upheld, or that firms with higher standards will be undercut by their rivals. If firms compete in part on quality, then raising standards becomes more likely (Haufler 2001:110).

Haufler’s argument is similar to Sarovar’s explanation that price is more related to quality than to environmental standards. It therefore seems necessary to have a certain quality standard to consider environmental criteria as well. The design of a textile product could influence both the quality and how eco-friendly the product is.

The bed-covers made at Continental are hand-woven and do not require any finishing. It is therefore easier to make these products eco-friendly than a textile woven on a machine that requires size and lubricating oil and a product that requires different kind of chemical finishes. Another factory I visited produces t-shirts for the American market and the t-shirts usually got different finishes to be more convenient in use (for instance: soft, easy washable, colours not fading in sun). It is my opinion that designers have an opportunity to design products that are eco-friendly or not. They can choose what kind of fibre, colour, techniques and finishing would be required to get the design. Many designers do not have knowledge about the environmental impact of their choice, since this is not usually a part of their design education. The quality of cotton-fibre and spinning methods at Welspun gives the towels so good quality that finishing is not necessary. Design is also influenced by customers demand. If consumers prioritizes and pays more for quality, producers would get more opportunities to focus on environmental criteria in production. At the same time a good quality product can be in use for a longer time, thus prolonging the life-cycle of a product.

‘Green products’ are usually being sold in markets for high-quality goods and services (Haufler 2001:24). Since Welspun’s terry-towels are of a high quality, they should have potential for being marketed even more as ‘green products’. Sarovar at Welspun is considering getting the EU eco-label on some of their products, if it can increase their market. Towels and bed-clothes are the kind of textile products that seem to have a ‘green market’, especially since increasingly more hotels in Europe are being certified with the EU eco-label and therefore are interested in eco-friendly towels and bed-clothes for their hotels (Eskedal 2006). This could be an incentive for Welspun to invest in the EU-flower, since they produce these kinds of textile products. It has been proposed that a greater part of the licensing costs should be used to market the label better. If this happens, it would give companies a greater incentive to invest in the eco-label since it has not been sufficiently well-known until now.

## 7.8 Proximity to the Final Customer

The distance from Welspun and Continental to their consumers is big, because consumers do not know who has produced the products they buy. As I argued in the section 7.4 on ‘customers’ the consumer pressure is only indirectly on the producers, because IKEA is between them. Globalisation makes the world ‘smaller’, but the geographical location of the producers increases the distances between them and consumers. The consumers in Europe and the U.S. are usually unaware of the environmental consequences of their consumption. This makes it more difficult to have a consumer-driven demand for environmentally friendly textiles. The distance between consumer and producer increases towards sub-suppliers. Wet-processing of textiles is often done by a sub-supplier. This process is both more harmful to the environment and complicated to understand, than stitching of textile products. It is thus easier for Western consumer to be engaged in Labour rights in the textile industry than in the environmental impact of the textile production. The environmental standards of a buyer are more likely to be complied with when the producers are composite mills like Welspun and Continental. This means that IKEA can direct their environmental requirements directly to their suppliers and not depend on them to give the same requirement to sub-suppliers. Luken and Stares has done

research on small scale textile producers in India and they conclude that “supply chain pressure could be an opportunity for many exporting enterprises in developing countries to improve their environmental and social performance” (2005:50).

In the textile industry the value chain can be very long, and often you find cotton production on the bottom. Cotton production can be both an environmental and social problem<sup>19</sup> and it is very difficult for a buyers like IKEA to have any control over it. Cotton is usually bought on auctions, so that the producer doesn’t even know where the cotton comes from. Welspun has a separate team to choose cotton, pick up the good qualities and deals directly with ginning operators. Managers at Welspun said that ginning is done in the decentralised sector and it is impossible to know if any children are working there. This example shows that the further away production comes from consumers, it becomes more difficult to control the production and this could again explain why there is so little environmental pressure on for instance cotton farmers.

## 7.9 Internationalisation

Textile Professor R.B. Chavan at Indian Institute of technology in Delhi said that exporting companies are more environmentally friendly than producers for domestic market, because exporting producers follow stricter regulations from other countries. Ruud has done a comprehensive study of environmental management of TNCs in India, and he concludes that there are

significant evidence of environmental management initiated at TNC-affiliated units in India, but often with significant deviations from intentions and policy commitments stated by headquarters. Despite the fact that HQ policy, procedures and standards are considered to be the

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<sup>19</sup> “In 1987, about 30 cotton farmers of the Prakasham and Guntur districts of Andhra Pradesh committed suicide after 90 per cent of their produce was destroyed by pests against which they had no protection; the latter grew because the farmers, goaded by the pesticide sellers, used more pesticide than was necessary to kill a major pest that used to keep the population of other subordinate pests in check. In 2002, about the same number of farmers committed suicide were adulterated and became ineffective, more or less for the same reasons” (Biplab 2005:76-7).

major influencing local environmental performance, local practise is not necessarily a replicate of HQ practises (Ruud 2001:23).

Since 'codes of conduct' are difficult to implement, it is quite possible that most exporting companies do not comply with all these criteria, but maybe they still have improved compared to before they started exporting. Mr. Nimkar claims that awareness about meeting eco-standards is spreading very fast in India, and the industry realises that to compete in the world market eco parameters are very important today. He believes that, "before long, all important textile manufacturers and suppliers will have achieved standard that are today important for dealing with foreign buyers" (Mr Ulhas Nimkar, CEO, Texan Lab interviewed by Mital 2003b). According to Gupta it has become almost mandatory to have a quality standard and social audit in place for entering the global market "Global buyers insist on these quality and audit certifications as they want to ensure sourcing their needs from efficient supply chains" (Gupta 2005).

Both of my case studies are exporting almost all of their production to European and American buyers. Mr. Sarovar told me that buyers have contributed to product development by introducing legal requirements and regulation from their respective countries. There has especially been more emphasis made on European regulations. Welspun has to send samples to prove that they comply with all requirements. In this way are the environmental requirements translated into product quality requirements. Mr. Sarovar told me how Welspun became environmentally sound; it started modestly with ISO 9001 and 9002, and in 1996 Welspun started with quality management as well. KPMG (who accredited Welspun with ISO 9001 and 9002) promoted them to go for ISO 14000 because they were quite impressed by effluent treatment plant and dyeing unit. It could have been tempting to conclude that managers at Welspun decided to get ISO 14001 and have their own environmental strategy, without any influence from buyers. But at the same time as KPMG convinced Welspun to go for ISO 14001, buyers started to present their 'codes of conduct'. I will argue that Welspun has been more proactive than most Indian companies in developing an environmental strategy. At the same time this has not happened in a vacuum, Mr. Sarovar said that in 1996/97 companies started to present their codes of conduct. Welspun has been influenced by the focus in the market on corporate responsibility, in the same way as IKEA has been influenced by these

ideas. However, IKEA started their environmental strategy before Welspun. Sarovar claimed that IKEA was the first buyer looking into environmental requirements, health and safety with their IWAY questionnaire and that they are more serious about commitment on environment than other buyers. This could indicate that IKEA's environmental strategy has influenced Welspun, by being a kind of role model.

Jeppesen and Hansen argue that it is a problem that explanations on environmental collaborations along the value chain have a strong Northern bias, where strategies and actions of suppliers are more or less seen as functions of interest and demands of the foreign multinationals. They state that suppliers in developing countries “adopt independent environmental strategies as well and increasingly Northern TNCs face highly powerful and sophisticated players in the South” (Jeppesen & Hansen 2004: 265). Welspun have their own ‘code of conduct’ and may be seen as an equal business partner for IKEA. As I argued in the section 7.4 on ‘customers’, it is more likely that Welspun has been supplying IKEA for a long time, since they already had their own environmental policy, than the parent-company hypothesis which could explain why Continental has become more eco-friendly. The scale of Welspun implies that it has to be an international company, because the domestic market would not be big enough for their production. Internationalisation is important for Welspun in the way that they have international competitors and have to keep up with what is going on in different markets around the world. Even if IKEA as a buyer have not had a lot of influence on Welspun's environmental upgrading, buyers in the market Welspun is operating in could have influenced Welspun to be more eco-friendly. Otherwise I don't think Mr. Sarovar would have said that it is a competitive advantage to be eco-friendly. Continental on the other hand is more similar to companies that are not exporting, and I will argue that the effect of being exporting to IKEA is quite visible. IKEA as a multinational buyer is demanding the most stringent requirements prevailing in the relevant countries where they compete. My conclusion is that Internationalisation is an important factor for environmental upgrading at both Welspun and Continental, but in two somewhat different ways. Welspun is influenced by operating in an international market and “internal resources and competitive strategies” (Jeppesen & Hansen 2004:261) have resulted in environmental upgrading. Continental has had more influence from one particular

international buyer. This means that Continental might have been more dependent on having a buyer focusing on environmental standards, and the effect of internationalisation could have been less with other buyers. Continental's upgrading can therefore be seen as a result of "external industry and market forces" (Jeppesen & Hansen 2004:261).

## 7.10 Environmental Strategy at Welspun and Continental

I have already explained how Welspun and Continental have reacted to market stimuli in section 7.4 on 'Customers' and section 7.7 'The traditional business case'. I argued that Welspun has been more proactive in developing an environmental strategy because they could see it as being a competitive advantage. However, neither Welspun nor Continental has shifted their production as a whole in a significant new and more environmentally friendly direction (Cairncross 1995:179). Their strategy has been to comply with the international standards on environmental criteria. A strategic decision to only produce ecological cotton coloured with natural dyes would have been a more dramatic shift in production. But both companies have chosen to acquire ISO 14001 and other certificates as a strategy to attract international buyers. The environmental strategy at Welspun can also be seen in relation to quality criteria, since by improving their production in general, it has been easier to also look at environmental criteria. In this way they are making full use of their innovative capacity as I argued in 'The traditional business case'.

## 7.11 Large-Scale versus Small-Scale

Small and medium scale enterprises are usually identified based on the number of employees, which can vary between 50 and 500 employees (Luken & Stares 2005:43). In India most textile producers are on the same size as Continental or smaller. IKEA has 20 textile suppliers in India; most of them are of the same size as Continental, while approximately 10-15 % of the suppliers are larger (Mr. Saha). In this section I will discuss how company size affects environmentally upgrading. One

of the important differences between small and large companies is available resources, and I will look at how this affects their ability to be eco-friendly. In the end I will mention one important factor not related to size; attitude.

Mr. Saha (IKEA) said that some of the difference between having a small or a large supplier is that the towel-production done at Welspun is in general more organized, with more high-tech machines in all stadiums. Mr. Harsharan (IKEA) said that Welspun differs from many other producers in India because they are very professional. Continental on the other hand is part of the unorganized sector, with handlooms, and the dyeing needs more control. Mr. Saha said that there has many times been discussion with small-scale suppliers in the unorganized sector.

If small-scale producers are more difficult to collaborate with, why does IKEA still have so many small-scale suppliers? One reason could be that there are not so many large companies to choose among, and IKEA might have chosen to have fewer and larger suppliers if they could. I don't think that this is a plausible explanation, since IKEA could choose larger suppliers in for instance China. Another explanation could be that IKEA considers the employment in the small-scale industry to be important, and therefore want to continue with these suppliers. But I will argue that it is more likely that certain products are produced by small-scale and not by large companies, and they are therefore not competing against each other. Hand-woven products have another quality than products woven by machines. The bed-covers Continental produces for IKEA are hand-woven and I think this is one important reason why IKEA want them as a supplier. Some other products produced for IKEA in the decentralised sector are hand-woven carpets, stitching and embroidery of products, in other words, mostly handwork. This could explain why Mr. Narain (IKEA) argued that it is a comparative advantage for India to have so many small scale producers. He argued that hand-craft products can not be produced at bigger factories. And without the small producers the hand craft tradition would disappear. In his opinion, people in west are demanding hand-made products.

Mr. Sarovar (Welspun) argued that the government should support the Indian textile industry into being more eco-friendly by tax reforms, liberalization and providing finances. At the same time he admitted that such reforms would badly affect village

empowering In India, since small-scale industry in decentralised sector would loose their market to bigger companies. “Big fish eat small fish” (Mr. Sarovar). Harsharan (IKEA) disagreed that small-scale industry will disappear. Agreeing with Narain, Harsharan believes that the small scale industry can continue to produce as they do, because the sale of textile will continue to increase and there will be room enough for small producers in addition to the big ones. But he argues that they should be more specialized.

### **7.11.1 Available Resources in relation to Company Size**

The differences in available resources influence the opportunities small or large-scale producers have to be eco-friendly. I will now look at how different resources like finances and knowledge are available to Welspun and Continental.

Mr. Sarovar said that one of the advantages of being a large producer is that when it comes to eco-friendly production “funds are pumped for implementation and revamping environmental programmes”. Mr. Saha (IKEA) said that Welspun has less sludge than smaller suppliers, because smaller suppliers are not able to invest huge amount of money on effluent treatment. Welspun’s new plant in Anjar will have Reverse Osmosis and therefore be able to reuse water and have both salt recovery and heat recovery. Mr. Saha argues that big strength leads to diversity, and so Welspun can build up more capacity. Since they have a big turnover, it is easier to invest.

The scale of large companies like Welspun allows them to face the indivisibilities associated with environmental management; that is those required investment in technology, human resources or certifications, which are similar for all the companies regardless of their size. Murshid argues that for the large firms, the costs of compliance to retailer’s codes are not regarded as important, since fixed costs do not increase per unit cost significantly. He is worried that it may be too expensive for a small firm to invest in cleaner technology to comply with the same codes, as a big company (Murshid 2003:24). Gupta argues that most of the big producers have been complying with quality standards and social audit of an international standard for some time now (Gupta 2005).



In some ways it might be easier for a small producer than a big, to make changes and be innovative. Large size does not only translate into large resources, but also into invested capital and long pay-off periods, factors known to restrict the incentive to innovate (Gjerdåker 2004:67). Gjerdåker argues that “rather than focusing on size, I find it more useful to focus on the nature on the pollutant and its role in the production process” (2004:67). The problem with environmental investment is that it usually has to be considered as long-term investment, and the investment might not always give any return. This makes it easier for big producers with more access to financial resources to invest in environmentally upgrading of the production.

Mr. Sarovar (Welspun) said that one of the advantages of being large producer is that management is clear about compliance of pollution control board. With more employees is a company is able to have employees with more specialized knowledge. Welspun has for instance 8 persons working in the environmental cell. This gives them better opportunities to concentrate on different environmental issues, as opposed to Mr. Garg at Continental who alone is responsible for social and environmental standards. Mr. Saha argues that big producers have a specialized person in each area, which is an advantage to be eco-friendly, while in the small units one person is looking after many things. At many small-scale enterprises it is not even usual to have one person responsible for environmental issues. According to Textile Committee, the awareness of new eco-standards is generally low in the decentralised sector (Textile Committee 1994:17). They also state that the management systems as well as the technology employed by small scale enterprises continue to lag behind modern standards/requirements. They claim that “unless this changes, it will be difficult for them to compete with bigger companies” (Textile Committee 2002:19).

### **7.11.2 Is Attitude more Important than Size?**

The argument that small-scale industry in decentralised sector is more polluting than big companies in the organised sector can be used to conclude that it would be better for the environment to have large companies. But it is also possible that other factors are more important than size, for instance, if companies are exporting, if they are included in the organised sector, or depending on management’s attitude towards

environmental issues. I asked professor Chavan if there could be any parts of textile production that small companies would have an advantage over big companies to produce more eco-friendly. He laughed and said it was a difficult question. He said that the size of a producer is not so important; the important factor is management's attitude. He said that the right way of thinking will lead to solutions of environmental problems. Mr. Saha (IKEA) also claimed that it doesn't matter if the producer is small or big. He said that attitude comes first, than finances. I will continue to discuss this explanation in section 7.13 on 'management as an agent'.

## 7.12 Are Employees Influencing Environmental Upgrading?

I am not able to say much about staff morale and their knowledge about environmental issues, since I have only interviewed managers and not other employees. Mr. Sarovar (Welspun) said that the younger generation is more aware of environmental issues. As I argued in section 7.6 on 'reputation', a good reputation could help to attract the best young professionals. If environmental issues are important for young professional, their opinions could influence Welspun into focusing on environmental upgrading to attract them as new employees. It is possible that Mr. Sarovar has experienced that younger employees has encouraged environmental upgrading already, but I have no information on this. Mr. Saha (IKEA) said that suppliers have increasingly more knowledge about environmental issues, because they have got more training. Workers have according to Mr. Saha a low education background. He states that through education of suppliers, the suppliers can educate the workers. The employees at Welspun could be an exception, since most of them are highly educated (Mr. Harsharan).

## 7.13 The Decision -Maker

A manager's decisions on environmental issues are influenced by his attitude and his perception of these issues. It is limited how much I can say about Welspun and Continentals managers' attitude and perception of environmental issues, after only

one interview with each of them. I will therefore begin this chapter with some reflections on the Indian perception of environmental responsibility, with examples from both Welspun and Continental, and from other Indian companies. I will give my interpretation of the managers' attitude and knowledge about environmental issues. Afterwards I will discuss the relationship between attitude and knowledge and present how managers at Continental and Welspun acquire knowledge about eco-friendly production. In the end I will give an example on managers' as 'policy-supporters'.

### **7.13.1 The Indian Perception of Environmental Responsibility**

Six CSR surveys have been conducted in India since 2000, and Balasubramanian et al. (2005:88) argue that this indicates that CSR is an increasing concern in India. Prasad (vice president, Clariant) argues that Eco-awareness is one of the thrust areas for the industry in the coming years (Prasad 2004). A survey from Indian Institute of Management in Bangalore gives some interesting statistics. 70 percent of the respondents believed that social responsibility was not only a government role but also a corporate one. Government legislation and regulation was not identified as a major driver (25 %). 87 percent saw 'self-regulation' as necessary. According to Balasubramanian et al. this attitude may "relate to the belief that 'state-driven' regulation, as its zenith during the period from independence to the early 1990s, does not 'work' well in India (2005:83-4).

Two different motivations for CSR have through the surveys been identified: 'profit-driven' and 'caring'. The 'profit-driven' argument is focused on 'pragmatic' CSR themes: "corporate reputation, employee and customer relations, stakeholder impact, responsiveness to local communities, legal compliance, strategic/corporate planning at board level and so on" (Balasubramanian et al. 2005:87). Mital argues in accordance with the 'profit-driven' argument that companies should focus on environmental criteria to get international orders: "Price today, is not the only deciding factor for international buyers. Quality at very competitive prices is what suppliers have to work at. Moreover, orders are also getting smaller. In this scenario, building up a structure that will address the eco norms at every stage is essential" (Mital 2005a).

The ‘caring’ argument is related to a concern for social improvement, ethics and values, and the need to care for society: the belief in the stewardship philosophy articulated in Gandhian understanding of business-society relationship (Kumar et al. 2001:1-2). In the middle of the plant area at Welspun there is a big sign with the words: “Race to save the Planet: The earth provides enough to satisfy every man’s need not for every man’s greed, Mahatma Gandhi”. The choice of this quote could indicate that Welspun’s management might be influenced by Gandhian stewardship philosophy, which in turn is influenced by Hinduism.

In a quote from Prasad, (the vice president at Clariant), he seems to be motivated by a combination of the two different approaches:

The new renaissance represents a new relational approach of the supplier with his customer that is based on an improvement in communication and the performance in the domain of operating processes and economical targets. It is the art of producing more with less in respect of our environment. In people we trust, in our environment we survive (Prasad 2004).

It is possible that the two different motivations for environmental responsibility are complementary and I will argue that managers at Welspun and Continental could therefore be influenced by both.

### ***Inspiration from Religious Scripts***

Lord Ram says – O Sita, sitting with you in this wonderful place, eating these sweet fruits and roots, neither do I want to return to Ayodhya nor do I desire a kingdom. The bank of this Mandakini river, frequented by elephants, where lions and monkeys come to drink water, decorated and lined by flower-laden trees – it is impossible that a person does not forget sorrow and feels happy (Ramayana 95:17-18 quoted in DTE 2000a)

Ramayana has been called the dearest text for a Hindu. It is both a tribute to Rama and Sita and it represent human ideals (Jacobsen 2001: xv-xvi). Indian religious scripts contain a detailed description of nature, like the verse quoted above. Ramayama describes the beauty of nature and the greatness of the woods, and these poems can be seen as the foundation for the Indian poet tradition (Jacobsen 2001:116). The Hindu religious tradition is a living tradition in which different viewpoints concerning nature have been negotiated over an enormous period of time.

What does a religious script have to do with a manager's attitude towards environmental issues? Perhaps nothing, but Balasubramanian et al argue that one can see that the historic cultural base of India encourages a CSR perspective that is different from many other countries. Features identified in the corporate citizen movement in India are a religious tradition encouraging business benevolence, business supporting nationalism in the first half of the 20<sup>th</sup> century and a strong affiliation with leader, both in business and politics, who seek to support society. It is also suggested that "the strength of Indian traditions and classical literature provides an underlying ethos that reinforces CSR" (Balasubramanian et al. 2005:82-3). Morale and ethical arguments on what is 'environmentally friendly' are often based on religious traditions. Religion is integrated in everyday life in India, and at Welspun there is for instance a temple inside the plant area, where employees can worship their Gods. I will therefore give a short presentation on how some of the most important religious scripts in India might have influenced Indians' perception of nature and environmental responsibility<sup>20</sup>.

### ***Legendary Epics***

The religious Epics in Ramayana and Mahabharata have had a great influence on how Hinduism is practised today. It may be said of the two great Epics that through legends, stories and dialogues and through the introduction of certain heroic characters they brought Hinduism home to the masses. In modern times, the Epic has been shown as a TV-series, it has become film and cartoon and the story is told in several books for adults and children (Jacobsen 2001:xii). "The Mahabharata has assumed the place in Hindu literature of an encyclopaedia of moral and religious instruction. There is a common saying that whatever is not found in the Mahabharata is also not met with in India" (Banerjee 1978:51).

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<sup>20</sup> Nina Witoszek has used a similar method to discuss how cultural tradition has influenced the Norwegian perception of nature (Witoszek 1997). There are of course other religious traditions in India with their respective scripts, but I will argue that stories from the scripts I present here are well-known all over India, and I have experienced that these stories have been part of everyday conversations, for instance with two managers I met at a textile company.

The old vedic text Bhagavadgita is part of Mahabharata. The important idea that runs throughout Bhagavadgita is the divinity of Krishna. All things were made by him and in him are all things. “I am the taste in the waters (...) the light of the sun and the moon. I am the pure fragrance in earth and brightness in fire. I am the life in all beings” (Bhagavadgita 7:8-9 quoted in Jacobsen 2001:43<sup>21</sup>). Rivers in India are considered to be holy, and Indians could therefore perceive pollution of rivers to be an unholy action. In the Mahabharata it is said that humans should fight the war between dharma and adharma (the good and evil) by doing their duty as a citizen (Jacobsen 2001:xxiii). Pollution can be seen as adharma, and I think that is one reason why some Indians fight against pollution. Pollution and water and/or environment were seen as key concerns by nearly all CSR surveys. Balasubramanian et al. conclude that “there is a strong belief that CSR is an essential element in ‘social uplift’ and development, something very relevant to India, but less emphasised in US, UK or Western European nations” (2005:86).

In Bhagavadgita, the message from Krishna is that people should do their social commitments as a devotion to him (Jacobsen 2001:xxviii-xxix). This could be one explanation of the long tradition of corporate social responsibility in India. Balasubramanian et al claim that the concept of corporate social responsibility “has been a well-established tradition in a number of organisation, particularly family-based companies with strong community ethos” (Balasubramanian et al. 2005:80).

### *Sustainable Environmental Practices*

Nature cannot be conserved as a museum piece and that is exactly what is happening now. We have to integrate elements, which can make conservation sustainable, and one such element is religion. We have to reorient ourselves and others (DTE 2000b).

Many environmental movements in India use religion as inspiration and in their argumentation. The most famous environmental movement in India is the Chipko movement. Chipko is a hindi word meaning “to hug” and the movement became

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<sup>21</sup> my translation

famous when woman went into the forests to protect the trees from being cut down by a company, by hugging the trees. This has been used in western environmentalism as an example of indigenous people, and especially woman, who fights for conservation of nature (Warren and Cheney 2003:295). But what is usually untold, is that a local cooperative made a request to the Forest Department for an allotment of ash trees to make agricultural implements and was not granted the request, the Forest Department gave access to a company instead. The “hugging” is not done mainly to protect the forest from being used, but it is a struggle for the right to use it (Narain, Sunita 2005). People need right to protect, manage, control, cut and plant trees to survive and get development. This is a utilitarian human-centred environmental agenda.

When the village woman in the Chipko movement tied sacred chords to the trees, they listened to recitations from Shrimad Bhagavatam, a religious text that tells the stories of the earthly life of Krishna. In this text they could find support for their struggle against the company and the Forest Department. The story tells us about Krishna’s defeat of the demon Dhenuka and of his opening of the forest so that the local people could enjoy its fruits and their cattle could graze on the grass in the shade of the trees (James 2004:365). For the villagers it was not a fight to conserve their environment, but to be able to use it in a sustainable way.

Religious scripts can inspire people to be distanced from the material world, but I will argue that Ramayana and Mahabharata can have a more pragmatic influence on many Indians, where they use religion to live as part of the nature. “Throughout the human life, one only draws from nature in form of the various natural resources. The Bhagavadgita stresses the concept of yajna, whereby a human can repay the debt of the gods of the natural world by undertaking certain social and spiritual commitments” (DTE 2000c<sup>22</sup>). This has inspired Indians to not only have a spiritual devotion of nature, but a practical approach as part of the devotion. Many environmental movements in India are founded by religious leaders, like Anna

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<sup>22</sup> underlining is mine

Hazare. He teaches that labour can be an act of devotion, and recommends offering one day each month to support water resource management, sanitation, education or other areas that can directly improve people's life. At the same time as he teaches this practical devotion, he shares insight from the Bhagavadgita and other ancient texts (James 2004:375).

Anil Agarwal at Centre for Science and Environment argued that we need to redefine poverty. It is not a lack of cash, but shortage/ lack of access to natural resources. He talked about the problem of ecological poverty (Narain, Sunita 2005). This is one reason why the environmental movement in India focus on how to fight the shortage of resources through rainwater-harvesting or fight against nature reserves where humans are evicted.

I will argue that managers at Continental and Welspun are influenced by the same tradition of sustainable use, and therefore work towards an environmental sustainable textile production. The water-harvesting-project initiated by Mr. Agarwal (Continental) is one example of influence from the traditional environmental movement.

### **7.13.2 The Importance of Attitude and Knowledge about Eco-Friendly Production**

One manager I spoke to didn't think environment is in the attitude of the management. He said that they are just following Indian law (he was of course talking about other managers, not himself...) (anon.). In section 7.11 on 'company size' Professor Chavan and Mr. Saha claimed that attitude is more important than company size to explain why a company is more eco-friendly. Mr. Sarovar (Welspun) agrees that attitude is important, and that people can change their attitude by education, because it makes them aware of environmental issues. He said that the younger generation with more education are more aware. Mr. Sarovar links knowledge about environmental issues and being eco-friendly with the profit argument: "Management can be convinced, how it pays back". Mr Garg said that Continental is eco-friendly because management has focused on environment since



the beginning. (This could be an overstatement, but at least they have been focusing on the environment for some time)

To see the possibilities of environmental improvements and to be a policy supporter may depend on the knowledge a manager have on environmentally friendly production. The competence of employees and managers improve the capability for the company to become more environmentally friendly. Porter and van der Linde argue that ignorance is “one of the major reasons that companies are not very innovative about environmental problems” (Porter and van der Linde 1995:131). Behavioural changes require learning, which in turn has to be underpinned by the appropriate process of knowledge acquisition.

Sometimes suppliers do not take corrective action because they don't know how to do it. One buyer stressed the importance of education and assistance in the implementation process (Murshid 203:18). I have already mentioned that there is a troubling shortage of information in India on environmental responsibility, environmental management and other relevant topics. Lack of environmental competencies could lead to lost orders for producers in India. Jeppesen and Hansen argue that foreign firms may not take the risk of engaging with local firms with dubious environmental records (Jeppesen & Hansen 2004:270).

Managers at Continental and Welspun have acquired knowledge about development in eco-friendly production from different sources. Agarwal (Continental) said that he gets knowledge about eco-friendly production from newspapers and buyers like IKEA. IKEA advise the firm on appropriate equipment need in each section, the training of workers and record keeping. According to Murshid, “local firms believe that they can grow with such buyers, who take a longer term view” (2003:18). Mr. Saha said that environmental upgrading of many producers has been a slow process, but with education the production has become much cleaner than it used to be. He said that some suppliers have now come to the stage where they are trained and take the ownership and are responsible for environmental upgrading. Mr. Garg (Continental) said that with more education the production will be more eco-friendly also in other factories.

The managers at Welspun get knowledge about eco-friendly production from Textile machines exhibitions, which show the new eco-friendly technology. Later they discuss the new technology with managers from other textile companies in the Environmental cell “Green Business”. Paying attention to the textile industry for some years I have noticed that there is a gap in focus on environment between textile machines and textiles. Gjerdåker made the same observation in the leather industry. During a fair with 600 tanners, in addition to technology suppliers she observed that environment was not an issue in the marketing of leather. However in the technology sector almost every firm had environment in focus on one way or another (2005:28). This could indicate that there is a focus in the textile industry on being eco-friendly, but so far it does not seem to be an important factor in marketing of most textiles. Welspun are also tied up with the chemical and dye-manufacturer SIBA to modify their products to be more environmentally friendly. This could indicate that collaboration with suppliers of chemicals and machines are an important factor for being eco-friendly. I have not been able to investigate this relationship, but it could be an interesting topic for future research.

### **7.13.3 Environmental Management Systems**

Prakash argue that managers who support implementing ISO 14001 can be considered to be ‘policy-supporters’ (2001). This environmental management system is an example of self-regulation. I argued in section 7.9 on ‘internationalisation’ that Welspun was encouraged by KPMG, but influenced by ideas in the business community to acquire ISO 14001. Since managers at Welspun see being eco-friendly as a competitive advantage, I will argue that ISO 14001 is part of their environmental strategy to get market benefits. Environmental Management Systems helps to implement operational practices in a coordinated and systematized basis and could also lead to cost savings (Hansen 2002:195-7). Common standards such as ISO 14000 can become the price of entry in some markets (Haufler 2001:110). Kishore argues that “in the short run, Indian companies should be encouraged to adhere to the Indian environmental laws while in the long run they need to adopt ISO 14001 Standards” (Kishore 1999:37).

In some industries, like for instance the cement industry in India, almost all of the companies have ISO 14001, but it is not very common for textile companies in India. Perceived market benefits seem to motivate organizations to obtain certification (Perry & Singh 2002:125). I will argue that perceived market benefit is the most important reason why Continental and Welspun have obtained ISO 14001. ISO 14001 is considered to be the highest level in IKEA's staircase model. One reason for this is probably that ISO 14001 is a third party certificate (IWAY 2002). ISO 14000 standards require companies to develop links between a corporate environmental code and actual implementation throughout the organization (Haufler 2001:14). Having ISO 14001 therefore make Welspun and Continental attractive suppliers for IKEA.

Krut and Gleckman have criticised ISO 14000 certification as an indicator on how eco-friendly a company is, because it indicates whether or not a company has in place elements of an environmental management, not whether it has actually improved its environmental impacts (Krut and Gleckman 1998). I will argue that the management system still is a good starting point for a company to develop environmental policies and then find a way to implement the policies. ISO systems can be a great investment for small-scale companies and Luken and Stares conclusion after doing research among small-scale textile companies in India:

In many cases plant managers and owners can reap greater returns from first thinking systematically about and exploiting the opportunities within their existing operation for improving performance (...) rather than blindly adopting more expansive investments in hardware and advanced management systems such as ISO 9000 and 14000 (Luken & Stares 2005:51).

Even with a management system such as ISO 14001 in place, management has to make judgements all the time on how environmental criteria should be evaluated. It is impossible to have objective environmental criteria, and this is a problem in developing eco-labelling schemes and certifications as ISO 14001; "Quite often the schemes are criticized for failures in their methodologies of both criteria-setting and conformity assessment, and it is acknowledged that the very nature of the schemes calls for a degree of subjective decision-making at some level" (Henry 1997:274). It can therefore be an advantage to involve different stakeholders (like NGOs and local

communities) to evaluate different environmental criteria. If people are affected by a company's pollution, their opinion on the problem should at least be part of the total evaluation.

Prakash stresses the importance of having policy-supporters among management to reach beyond-compliance policies (2001). Another example of managers being policy-supporters is that Mr. Sarovar (Welspun) said that he was considering getting the EU eco-label on some of the towels. He had studied the requirements for the label, and said that they would be able to meet them. However, it would be necessary for him to convince other managers that an investment in such a label would give a return.

## 7.14 Summary of Analysis and Concluding Theoretical Remarks

In the analysis I have tried to explain why two actors, Welspun and Continental has chosen to upgrade their production environmentally. Various stakeholders have been identified in the different explanations of external and internal factors. I have described a complex situation with a combination of different explanations, instead of building up to one concluding explanation. In chapter 2 on theory I said that I would return to how external and internal factors are related to structure and agency after the analysis. I will now summarize some of the important factors I have identified in the analysis and see how they are related to structure and agency.

“Social structure is carried and has its effects because it is embodied in individuals through their socialization and provides them with dispositions and tendencies to act in particular, structured ways” (Scott & Marshall 2005:645). The question then is how much freedom does the agent have to make a choice when he is socialised in this way? I have argued that I believe agents have some (not complete) autonomy in pursuing beyond-compliance policies. Since it is managers at the respective factories and not Welspun or Continental in itself who make the decisions on policies and environmental strategy, I will focus on managers as an agent. Both internal and external stakeholders provide structures for managers.

“A social structure is not directly visible. It is evidenced in the observable movements and actions of individuals, but it cannot be reduced to these. The core institutional norms and meanings are cultural phenomena that exist only as shared ideas and representations in the minds of individuals” (Scott & Marshall 2005 645)

The attitude and perception of environmental responsibility can, as I have explained in section 7.13, be influenced by the managers’ cultural tradition. According to Mr. Sarovar and Mr. Agarwal the awareness about environmental standards started between 1998 and 2002. At that time, buyers started to demand compliance with environmental criteria in their ‘code of conducts’. This can indicate that norms and meanings about environmental responsibility changed in the previous decade in the business community in general. The new focus on environmental responsibility may have influenced the suppliers, especially since they participate in an international textile industry where they are related to foreign buyers. I have argued that internationalisation is an important factor for environmental upgrading at both Welspun and Continental, but in two somewhat different ways. Welspun is influenced by operating in an international market and has used internal resources to develop an environmental strategy resulting in environmental upgrading. Continental has had more influence from one particular international buyer. This could indicate that internal stakeholders like managers are providing an important structure for Welspun, while external stakeholders like IKEA provide more important structures for Continental.

I will argue that IKEA and other buyers with their ‘codes of conduct’ provide a structure with focus on environmental upgrading. Even if price, quality and delivery-conditions determine first if there can be any business transactions at all, environmental criteria are also important in IKEA’s choice of suppliers. If the supplier is not willing to make necessary environmental upgrading, IKEA will not do business with the supplier. By demanding environmental standards, suppliers who are able to comply with these standards get a competitive advantage in getting the order. This gives them an economic incentive to upgrade their production environmentally. However the encouragement is limited, since buyers do not pay more for their orders. The structure provided by buyers is also limited by short-term orders and if the share of orders is small. This is because a buyer has more power to influence when he becomes an important and reliable buyer, as I have argued is the

case between IKEA and Continental. IKEA has tried to be a responsible buyer by monitoring and following up action plans with their suppliers. Their interactive approach may have been an important factor in influencing environmental upgrading.

Welspun and Continental are located in industrial areas, with lower risk for social pressure and additional environmental regulation. At the same time both companies in the organised sector and therefore are pressured to comply with present environmental regulation. Environmental regulation is related to geographical location, and the lack of regulation on water recycling in the states where Welspun and Continental are located may have contributed to the managers' perception that water is not a problem. This example can be given the explanation that manager as a profit-maximising agent does not have any economic incentive to reduce water consumption when water is subsidised. Even though this explanation is convincing, it might overlook other possible complementary explanations that could give valuable insight into drivers of eco-friendly production. The same example can be given the explanation that norms of water-consumption are incorporated in the structures government provides by its regulation, and that this structure influences manager's perception of water-consumption. In the same way may the control regime focusing on effluent indicators be one important reason for the industry to focus on end-of-pipe solutions, instead of pollution prevention.

I have never intended to determine the relative importance of agency and structure, since this theoretical question is too complicated to be answered in a master-thesis. However, I hope that I have been able to show how the concepts of agency and structure can be applied to the explanations I have made in the analysis. With these examples I have showed that manager as an agent has limited choices because he is dependent on structures provided by external and internal stakeholders. External stakeholders like for instance the government decide what kind of regulation companies has to comply with. These regulations can be viewed as external factors which again are structures the manager is restricted by. At the same time there is an interaction between agency and structure, since the agent is not only restricted by structures, but can act to influence external stakeholders to change the structures.

This makes it very difficult to determine how much weight should be placed on either agency or structure.

## 8. Conclusion

The purpose of this thesis has been to get knowledge about the prerequisites for and the forces behind a more environmentally friendly production in India. By studying two textile producers as ‘good cases’ I have identified 13 different external and internal factors from a review of literature on what encourages a more environmentally responsible industry. I have used these 13 different factors to explain that Welspun and Continental are more environmentally friendly than comparable producers. I have given many complementary explanations and have not concluded that only one or a few of these factors can explain my case studies. It would not make sense to reduce a complex reality into an explanation with only a few important factors, since all the different factors are more or less closely related and can therefore influence each other.

I started this thesis by claiming that industry is sometimes more eco-friendly than law enforces it to be. Enforcement of regulation in India is not functioning as intended due to a lack of resources and too much corruption. I have identified some other reasons than regulations to why Continental and Welspun might have become more eco-friendly. However, at the same time I have seen that other sources of pressure sometimes are related to regulation, for instance through buyers ‘codes of conduct’. It is not only a demand that suppliers should comply with regulation in the producing country, buyers like IKEA are demanding the strictest environmental criteria that exist in any of the markets they operate within.

By giving a few examples of how the concepts of structure and agency can be applied to the explanations in the analysis, I have shown that external stakeholders provide structures for internal stakeholders like managers, and at the same time managers are to some degree able to influence external stakeholders. This mutual interaction makes it difficult to determine how much weight should be placed on structure or agency.

Knowledge about the ecological consequences of textile production and options to produce more eco-friendly are necessary not only for the internal stakeholders to be



capable of changing, but also for external stakeholders to pressure or encourage them to change.

Internal factors such as managers' attitude towards environmental responsibility could influence the decisions made on environmental upgrading. However, without any pressure from one or more of the external stakeholders, I find it unlikely that internal stakeholders such as managers should be sufficient to secure an environmental strategy. They can not operate in a vacuum and have to respond to market demand, government regulation and pressure from civil society. Managers' perception of external pressure and their ability to see environmental standards as opportunities instead of threats could be important factors behind explaining why Welspun and Continental are more environmentally friendly than comparable producers. The context of the two cases is quite similar, but the differences in internal factors give some slightly different explanations. I have argued that being an exporting company could give important external pressure on environmental upgrading that domestic companies do not receive. The difference in size is an important factor in explaining how the producers relate to external pressure. Larger producers like Welspun have more available financial resources to invest in environmental upgrading, and they are also able to have a more specialised workforce, with knowledge of eco-friendly textile production.

Managers at both Welspun and Continental have seen it as a competitive advantage to be more eco-friendly. I have argued that IKEA as a buyer has been an important factor for Continental's environmental upgrading. This could explain why they are more eco-friendly than most other small-scale textile producers in India. Managers at Welspun have developed an environmental strategy based more on internal resources, but still related to their buyers. This could indicate that producers of a small-scale are more dependent on encouragement from buyers or other external stakeholders to make up for their smaller resources, compared to a bigger company.

By getting a better understanding of how different factors could explain why a company becomes more environmentally friendly, there is a greater possibility to enhance the drivers that encourages and pressure companies into being more environmentally friendly. More research on the relations between the different

factors is needed, but I hope that my thesis has contributed by giving an insight and an overview over many of the factors involved in a complex explanation to why a company like Welspun or Continental has become more environmentally friendly.

# Appendix 1: Interview-Guide for Producers

## General Background

1. **Could you tell me the story of how your company/unit become environmentally sound?**
  - a. When was environment addressed as an issue for the first time?
  - b. What kind of ETP do you have?
  - c. What kind of pollution prevention are they doing at the factory?
2. Date of establishment
3. Annual production
4. Annual report?
5. Advertisement of your company? (Brochure?)
6. When it comes to eco-friendly production, are there any advantages being a small producer compared to a big producer?

## Market

7. How much of your production is exported?
8. Who are your biggest buyers?
9. **In which way do interactions with customer (and suppliers) contribute to product development?**
10. In your market, how important is eco-friendly production compared to price and quality? (Why do you think customers choose your product?)
11. Who are your main competitors?
12. When did you start to supply IKEA?
13. How much of your production is ordered by IKEA? (How important would you say IKEA is compared to your other buyers?)

## Eco-Friendly Production

14. **Is there any cleaner technology you would have liked to invest in if it was less expensive?**
15. Where/how do you get knowledge about development in eco-friendly production?
16. What is the level of investment cost in cleaner technology compared to conventional technology?
17. Does customer pay more for eco-friendly products?
18. Has pollution abatement contributed to profits in any way? (reduced or increased)
19. If a supplier has to buy equipment because of buyers demand, do you think the buyer should finance parts of the investment? Or pay more for the product?
20. **What is your experience with environmental standards from your buyers?**
21. Did you ever invest in eco-friendly equipment because of demand from a buyer?
  - a. Who and what kind of investment?

**22. What is the greatest environmental challenge for Indian textile companies?**

- a. Did your company at some time have any of those problems? When and how did you overcome the problem?
- b. Have there ever been any complains from locals on pollution from your production? (When and what was the complain about?)

23. Is the environmental challenge a technical, financial or attitude challenge?

**24. What is your opinion about Indian environmental laws?**

- a. And the enforcement of laws?

## **Government**

25. What do you think about the government's policy towards the textile industry?

**26. What can the government do to support the Indian textile industry in becoming more eco-friendly?**

27. Have there been any incentives through central or state policies to make changes in production process? Or to introduce eco-friendly production?

- a. Have you ever used TUF?
- b. Any other scheme?

## **Overall Plant**

1. Total production
2. Total water consumption
3. Total energy consumption

## **Raw Material**

1. What kind of raw material?
2. From where do you get it?
3. Percentage of organic cotton?

## **Yarn Formation**

1. How much fibre is lost during spinning?
2. What do you do with fibre leftover from spinning?
3. What kind of lubricating oils?

## **Fabric Formation**

1. What kind of lubricating oils?
2. What kind of sizing?
3. How much sizing?
4. What kind of weaves?
5. How many picks per minute?
6. Noise: how many decibels?

## **Preparation**

1. What kind of preparation is done?
2. Which type of bleach is used?
  - a. Amount of bleach
  - b. Amount of water

## **Colouring**

1. Type of dye
2. Amount of water per kg fabric
3. Ratio of dye per meter or kg fabric?
4. Open/closed process?
5. How much dye is fixated in fabric?
6. Any recycling of dye?

## **Printing**

1. Type of printing
2. Type of thickener
3. How much residue is left after printing?

## **Finishing**

1. What kind of finishing? For what purpose?
2. Chemical or mechanical processes?
3. Water consumption
4. Which chemicals? Quantity?
5. Open/closed process?

## **ETP**

1. What kind of primary treatment?
2. What kind of secondary treatment?
3. Any tertiary treatment?
4. How much quantity is treated per day?
5. Quality of effluent entering ETP (BOD, COD, STS)
6. Quality of discharged wastewater (BOD, COD, STS)
7. What do you do with the sludge?

## Appendix 2: Interview-Guide for IKEA

### IKEA and Suppliers

1. How many textile suppliers do IKEA have in India?
  - a. How many are in small-scale industry
2. **How do suppliers usually react to IKEA's environmental standards?**
  - a. Is it difficult to find suppliers that comply with IKEA's environmental standard?
3. **In what way do Welspun and Continental differ from other textile producers in India?**
  - a. Are Welspun and Continental representative for IKEA's suppliers in India?
4. **What is the difference between having a small unit and a large unit supplier?**
  - a. Advantages and disadvantages
  - b. Why would you choose a small supplier over a big one?
  - c. Do you think India will continue to have a large small-scale textile industry?
5. When did IKEA start to supply from Continental and Welspun?
  - a. What kind of contract do you have with them?
  - b. In what way has IKEA interacted with Welspun and Continental?**
  - c. Have there been any changes in production or ETP due to IKEA's environmental standard? (What is IKEA's contribution?)
  - d. Does IKEA give any financial support to companies who want to invest in eco-friendly equipment? For instance as loans?
  - e. How important do you think IKEA is as a customer compared to Continental's and Welspun's other customers?
  - f. Would it make a difference if IKEA did not give any new orders?

### General about the Textile Industry in India

1. **What is the greatest environmental challenge for Indian textile producers?**
  - a. Is it a technical or financial challenge?
  - b. Or management attitude?
2. **What do you think about Indian environmental law (and enforcement) in relation to the textile industry?**
  - a. A manager at a textile company told me that many companies bribe inspectors or in other ways fool the control from CPCB. What do you think?
3. **What is your opinion about the government's textile policy in relation to environment?**
  - a. Do you have any opinion on how the government can provide incentives to make the Indian textile industry more eco-friendly?

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## List of Informants

### Welspun

Mr. A.R. Sarovar (Sr. Vice President (TQM)) (2005: October 3)

Mr. Sarovar answered most of the questions, but Sanjeev A. Pandey (DY. General Manager (TQM) )and Mr. Sanjib Kumar Sen (DY. General Manager (TRG & DEV.)) were also present and contributed to the conversation. (2005: October 3)

### Continental

Mr. Suresh Agarwal (Managing director) (2005: September 30)

Mr. S.C. Garg (Responsible for Environment and Social Standards) (2005: September 30)

### IKEA

Mr. Rupak Saha (2005: October 4)

Mr. Harsharan (2005: October 3)

Mr. Sumesh Narain (2005: September 30)

### Others

Chavan, R.B (2005: September 9): Professor in Textile technology at Indian Institute of Technology Delhi

Gulrujani, M.L (2005 September 9): Professor in Textile technology at Indian Institute of Technology Delhi

Nair, D.K (2005 September 9): Secretary General at Confederation of Indian Textile Industry